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The Value of Films in
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THE VALUE OF FILMS IN HISTORY TEACHING

BY

FRANCES CONSITT

B.LITT. (OXON.), PH.D. (LEIDS)

BEING THE REPORT OF AN ENQUIRY
CONDUCTED UNDER THE AUSPICES OF
THE HISTORICAL ASSOCIATION WITH
THE AID OF THE CARNEGIE UNITED
KINGDOM TRUSTEES

LONDON

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INTRODUCTION

THE Council of the Historical Association, in transmitting the report of their investigator, Miss F. Consitt, B.Litt., Ph.D., on the value of films in the teaching of History, desire in the first place to record their appreciation of the action of the Carnegie Trustees in providing the funds necessary for the enquiry. They have no doubt that the Trustees will feel that the expenditure has been fully justified.

The progress of the enquiry has provided a striking example of co-operation between various educational bodies, the Historical Association, the University of Leeds, and the Local Education Authorities of Leeds, Bedfordshire, Bradford, London, Tottenham, Wolverhampton, and the East and West Ridings of Yorkshire. This co-operation, coupled with the hearty goodwill of the teachers, has given breadth and value to work which otherwise might have been narrow and unconvincing.

The Report appears to the Council to be remarkable both for the variety of type of school in which experiments were carried out and for the extent to which the opinions of both teacher and pupil are utilised to supplement quantitative methods of estimating results. Such procedure appears to be peculiarly valuable in the case of such a subject as History, where the results of the teaching cannot always be estimated in terms of the written response.

A difficulty arises, however, from the very success of the method. The effect of the Report is cumulative, as teacher after teacher gives an opinion. The Abstract, which has been prepared for the information of those who lack either time or inclination to read the Report itself, cannot contain the proofs in full. The Council therefore view with great satisfaction the decision of the Carnegie Trustees to print the full Report. It should, in the first place, have an important bearing on the future teaching of History, particularly in the reorganised schools. It should also throw light on one small section of a national or rather an international problem, the relation of the Cinema to Education.

ACKNOWLEDGMENT

GENEROUS help has been received at every stage of the enquiry from a wide circle of people. Thanks are due to :—

The members of the Film Enquiry Committee of the Historical Association, and especially to the Chairman, Mr. G. T. Hankin, for his stimulating suggestions and invaluable help throughout the whole enquiry.

The Illustrations Committee of the Historical Association, Mr. Weaver, the Honorary Secretary, and the Assistant Secretary, Miss Friend.

The University of Leeds, and especially Professor Strong and the Staff of the Education Department, for constant, kindly criticism and practical help. I am deeply indebted to Dr. Wynn Jones of this Department for unstinted help with regard to the psychological aspects of the enquiry.

The Leeds Education Authority, for permission to conduct the major part of the enquiry in their schools, and the Education Authorities of Bedfordshire, Bradford, London, Tottenham, Wolverhampton, the East Riding and the West Riding of Yorkshire, who also allowed tests.

The Head Teachers and Staff of the schools visited. It is impossible to give more than a general acknowledgment to the 143 teachers who gave definite assistance in the enquiry, but sincere thanks are offered ; without the teachers' cordial aid nothing could have been accomplished.

The Principal and Staff of the Bingley Training College.

The Bingley and Bradford Branches of the Workers' Educational Association.

To these and all others who have kindly furthered the enquiry, I tender grateful thanks.

FRANCES CONSITT.

SCHOOLS WHERE EXPERIMENTS WERE PERFORMED

Girls' Elementary Schools (Town).

LEEDS . . .	Bewerley Street.		
	Blenheim Road.	(S.G.)	
	Low Road.		
LONDON . . .	Burghley Road.	(S.G.)	St Pancras, N.
	Burghley Road.	(J.G.)	St Pancras, N.
	Fairfield Road, Bow.	(S.G.)	
	Northwold Road, Clapton.	(S.G.)	
TOTTENHAM, MIDDLESEX.	Risley Avenue.	(S.G.)	

Boys' Elementary Schools (Town).

LEEDS . . .	Becket Street.		
	Belle Vue Road.		
	Bewerley Street.		
	Blenheim Road.	(S.B.)	
	Kirkstall Road.		
LONDON . . .	Low Road.		
	Hamond Square.	(S.B.)	Hoxton.
	Medburn Road.	(S.B.)	St Pancras, S.E.
	St. Aloysius R.C.	(S.B.)	St Pancras, S.E.
	St. John's Road.	(S.B.)	Hoxton.
TOTTENHAM, MIDDLESEX.	Risley Avenue.	(S.B.)	

Mixed Elementary Schools (Town).

LEEDS . . .	Beeston Hill.		
	Hunslet Lane.		
	Princes Field.		
WEST RIDING OF YORKSHIRE.	Featherbank School, Horsforth.	(Semi-rural.)	
WOLVERHAMPTON .	St. Jude's School.	(C.E.)	

Mixed Elementary Schools (Rural).

BEDFORDSHIRE .	Goldington.		
	Maulden.		
EAST RIDING OF YORKSHIRE.	Naburn.	(C.E.)	

Central Schools.

- LONDON . . . Bow Road Central School. (Mixed.)
 The Lyulph Stanley Central School (Boys), Camden
 Town.
 The Reay Central School (Boys), Hackford Road,
 S.W. 9.

Girls' Secondary Schools.

- BEDFORD . . . Girls' Modern School.
 BRADFORD . . . Carlton Girls' High School.
 Grange Girls' High School.
 LEEDS . . . Chapel Allerton High School.
 Leeds Girls' High School.
 Preparatory Department, Leeds Girls' High School.
 Girls' Modern School.
 Roundhay High School.
 Thoresby High School.
 West Leeds High School.
 LONDON . . . Greycoats Hospital, Westminster.
 HARROGATE . . . Girls' Public School : Queen Ethelburga's School.

Boys' Secondary Schools.

- BEDFORD . . . Boys' Modern School.
 LEEDS . . . The City of Leeds School.
 The Grammar School.
 Boys' Modern School.
 Roundhay Boys' School.
 West Leeds High School.
 LONDON . . . Westminster City School.
 WEST RIDING OF YORKSHIRE. Wheelwright Grammar School, Dewsbury.

Mixed Secondary Schools.

- WEST RIDING OF YORKSHIRE. Castleford Secondary School.
 Pudsey Grammar School.

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CHAPTER I

THE POSITION AT THE OUTSET OF THE ENQUIRY

1. Factors operating against the Making of School Films : the Power of the Cinema. A deadlock has for some time existed in the matter of educational films between teacher and producer. Producers refuse to create educational films for a non-existent market. Teachers refrain from asking for projectors, since they cannot judge without trial of the value of the educational film, nor are they confident in the supply of suitable reels. This vicious circle is particularly to be deplored since the cinema is so potent a factor in modern civilisation. Teachers cannot ignore its challenge. It is here in our midst, whether we like it or no ; it behoves us to see whether we cannot harness this undoubted power to our own uses.

2. Much Theorising, little known Fact about the Educational Film. There has been from time to time discussion of the general problem of the teaching film in educational circles, some airing of the matter in the popular and educational press. Arguments have been advanced for its use, that, for instance, the film in its vividness and detail far surpasses the teacher in the presentation of any lesson of the purely narrative type. Many counter-arguments have been brought forward. The film method has been stigmatised as too facile, too episodic, too mechanical ; its use would dwarf the child's imaginative powers and atrophy thought, since, say the film's opposers, a class is intellectually passive while looking at the screen. But these contentions were in the nature of a priori argument. The teaching world and other interested persons theorised for and against the film according to their personal predilections, but without experiment there was no ground for either point of view. Even a superficial study of the bibliography of the educational film will support this contention. For example, the Board of Education issued for the last Imperial Education Conference a pamphlet giving a list of 150 books and articles dealing with the cinema in Education. Of these only 9 showed by the titles that they were records of actual experiments.¹

3. Early Experiments with the School Film : Weber's Experiments. Experiments have, of course, been conducted all over the world. It may be useful to mention a few of the most important and to summarise the results, though the earlier work is chiefly interesting to-day in that it provides a basis for later tests. For instance, in 1922 Weber performed

¹ Imperial Education Conference, 1927. *The Cinema and the Child* : A list of books, etc., in the Board of Education Library prepared for the use of delegates to the Conference.

a series of experiments on the comparative effectiveness of various visual aids in the VIIth Grade of a Public School in New York City. This grade roughly corresponds with Standard VI. in an English Elementary School. Working with control groups of children taught orally and experimental groups using films, he obtained better results from lessons accompanied by films than from purely oral lessons. Yet his experiments did not prove that the film is an advance on the ordinary school lesson, for his oral instruction largely took the form of lectures unrelieved by question and answer or by other teaching devices.¹

4. **Freeman's First Experiments.** In 1924 Professor F. N. Freeman of Chicago University and his twelve collaborators published the results of a series of experiments in the schools of several American cities on the comparative value of motion pictures and other methods of instruction. The film was compared with oral teaching and with other visual aids such as slides, stereographs, and still pictures. Of the many interesting and valuable findings, two of the most important are of general application. One is concerned with the child's understanding of action. "Motion pictures then appear to have two grounds of merit. First, there are some cases in which the understanding of an object requires that it be shown in motion. Second, it may be, though on this point we have less certain evidence, that motion makes objects attractive and as a consequence attracts close attention and prompts to better learning, even though it is not necessary to an understanding of the subject. The first type of advantage is so great as to justify motion pictures in those cases where it is essential to grasp the nature of a movement. The second type of advantage must be weighed in comparison with the advantages of still pictures."² It was considered that, outside the range of subjects concerned with motion, "the older devices are as effective or more effective than motion pictures."³ It must be remembered, however, that in these cases the criterion of judgment applied was the amount of information acquired by the pupil. The chief principle enunciated was that the relative effectiveness of verbal and visual instruction varied according to the nature of the instruction given and the character of the pupils' previous acquaintance with the objects of instruction. The film was valuable for the presentation of matters which the child cannot picture in terms of his previous experience. Processes of manufacture or biological facts, like the structure of the eye, are instanced. As to the nature of instruction, the contrast is drawn "between concrete experience on the one hand, and the comparing, analysing, and generalising operations on the other hand." It was considered that for the acquiring of the first films were invaluable, but that the communication of abstract ideas depended largely on language. This section of the report concluded with the remark: "The analysis of the curri-

¹ Joseph J. Weber, *Comparative Effectiveness of some Visual Aids in Seventh Grade Instruction*.

² *Visual Education*, ed. Frank N. Freeman, p. 74.

³ *Ibid.*, p. 72.

culum, in order to determine what can advantageously be taught with the aid of pictures, is, however, only begun. This investigation will have served a purpose if it emphasises the need of such analysis.”¹ The experimenters, then, felt that they were merely opening up the subject. Moreover, the findings were somewhat vitiated by the fact that the films used were not representative motion pictures. One, for instance, contained less than 50 per cent. of pictures of action, and nearly 40 per cent. consisted of sub-titles.²

5. The Eastman Experiment on the Value of Films for teaching Geography and Nature Study : Statistical Results. Freeman followed up his own first investigations by an enquiry, in collaboration with Dr Ben Wood of Columbia University, into the value of films in the teaching of Geography and Nature Study, the films in this case being specially prepared educational films made by the Eastman Kodak Company. 232 teachers, controlling 11,000 children in 12 widely separated American towns, took part in the tests. The children were divided into comparative, graded groups for teaching with and without films. The report, published in the autumn of 1928, established the value of films for these subjects with the children concerned. The statistical findings are summarised as : “The pupils in Geography gained 33 per cent. of one standard deviation more, and those in General Science gained 15 per cent. of one standard deviation more, than an equal number of pupils taught without the use of the films.

In Geography	33 per cent.
In General Science	15 „ „
Average gain for both subjects	24 „ „

These results have been widely misunderstood by non-statisticians who ignore the phrase “one standard deviation.” The position was explained by E. R. Enlow, Director of Visual Education in the Atlanta Public Schools, in a review in *The Educational Screen* of October 1929. He writes : “An average gain of 24 per cent. of one standard deviation actually means in terms of school marks a gain of $1\frac{1}{2}$ points approximately. Hence the average pupil who is able to make a school mark of $68\frac{1}{2}$ points (grade of $68\frac{1}{2}$ per cent.) without films could be raised $1\frac{1}{2}$ points to the passing mark of 70 by the use of films. This is an actual gain of 2.2 per cent.”

6. Teachers' Opinions. That is to say, the gains, according to statistical data, are comparatively slight, but the reviewer continued : “This is a case where objective test results are not, in the opinion of the writer, comparable to the composite, subjective opinion of the teachers who were privileged to use the films during the experiment. The comments heard by the writer from both teachers and pupils in just one city were far more convincing than mere numerical contrast between film

¹ *Visual Education*, ed. Frank N. Freeman, p. 71.

² *Ibid.*, p. 61.

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and non-film groups. The most significant statement in the Eastman brochure is not the fractional standard deviation gains, based on certain tests, but rather the teacher expressions of pupil gains in various directions." The list given in the Eastman brochure is :—

- "(1) An increased interest in school work and a sustained interest in the topics studied.
- (2) A quicker originality and a larger participation in project work and other self-activities.
- (3) A greater desire and ability to discuss subjects and to write about them.
- (4) An increase in the quantity and an improvement in the quality of material which they read.
- (5) A clearer appreciation of the richness, accuracy, and meaningfulness of personal experiences.
- (6) A greater facility in correlating features of their lessons with community conditions.
- (7) A contribution to life experiences difficult and often impossible to secure by any other method.
- (8) A marked improvement in range and accuracy of vocabulary.
- (9) An ability to concentrate mental activities, to think more accurately, and to reason more soundly." ¹

7. **Experiments of Revesz and Hazewinkel.** A series of experiments, also with geographical films, were conducted in 1924 by G. Revesz and J. F. Hazewinkel (of the Psychological and Paedagogical Laboratory, Amsterdam).² Their experiments were taken with boys and girls of 13 to 16 years in the Amsterdam Lyceum. In the first experiment with sets from the two lowest forms, children aged about 13, two groups had a lesson with lantern slides, the parallel groups with a film. A week later all groups wrote free descriptive essays on what they had seen. The value of the essays was estimated according to the number of primary facts remembered. The enquirers write : "We selected such [facts] as were essential to the story and made for a right understanding of the whole, leaving all facts of little or no importance on one side." It was found that the lantern-slide group wrote far longer essays than the film group and made fewer errors in proportion to the length of their accounts. Another experiment with scholars aged 13-14 compared three groups taught respectively with an interrupted film, a continuous film, and lantern slides. No oral instruction appears to have been given in either of these experiments. The pupils learned what they could from looking at the material presented. The results of the second experiment resembled those of the first ; the cinema proved inferior to the slide, whether an interrupted or continuous film was used. Delayed tests were given after ten months, when the results of slide and film groups were equally good. The investigators considered that these delayed results did not afford a

¹ *The Educational Screen*, November 1928, p. 220 ; October 1929, pp. 228-9.

² *The British Journal of Psychology*, vol. 15, October 1924, p. 184 *et seq.*

pure basis for comparison, for lantern slides were used frequently with these classes, films rarely, so that confusion would arise more freely with the slides than with the film. An analogous argument might equally explain the superiority of the result for lantern slides in the first instance; the scholars were used to the lantern slide for study purposes, not to the film. The effectiveness of the film might well increase with use. In a further experiment with film and slides in the two lowest forms, where a preliminary oral lesson on their subject matter was given to both groups, the average number of main facts remembered per pupil was identical in film and slide groups. Thus, these experimenters in recording that the slide has proved of more value than the film, apart from the fact that they judge from the informational aspect only, are merely asserting that the film unaided by the teacher is less useful than the slide unaided. The point made bears little reference to actual school practice, where the teacher uses all these things to supplement his own instruction. In the one experiment where the teacher helped the film by oral preparation, results from film lessons and slide lessons were equally good.

8. Philpott's Experiment. The results of an important English experiment conducted by S. T. J. Philpott at University College, London, were published in 1925. Groups of scholars were each given five different kinds of lessons: the film alone, slides alone, a purely oral lesson, a film talk, a slide talk. The films mostly dealt with Geography and Nature Study; no historical films were used. In considering the children's descriptive essays, written immediately after seeing the film, the experimenter concentrated on obtaining a measure of "vividness." Some thing ought to be present showing whether film memories were more vivid than other memories. Hence, emphasis was laid on particularity of report. It was found that when writing about an oral lesson the child was more general, when writing about films he was more particular. In so far, then, as particularity might be taken as a measure of vividness, the "film" essay was more vivid than the "slide" or "oral" essay.¹

9. The Knowlton Experiment. It remains to consider another experiment on the value of films in the teaching of History carried out in America from November 1927 to September 1928. The final, published results became available in this country in the spring of this year, 1930. Professor Knowlton of Yale University conducted this enquiry into the value of films for History teaching with the VIIIth Grade of a Junior High School at New Haven, Connecticut, that is, with children whose median mental age was 12 years 11 months. For a period of five months, from February to June 1928, all the 521 pupils in the chosen grade received the same instruction in History, but the experimental groups saw films at the opportune moment in the course, the control groups having only the usual aids. The children were divided into sections grouped on the basis of I.Qs. and E.Qs. Each teacher taught at least two of these

¹ *The Cinema in Education*, ed. Sir James Marchant, p. 29 *et seq.*

classes, and in three cases three, so that each teacher had at least one experimental group and one control group, and three teachers had two control groups. Objective tests based upon the units of instruction which the films illustrated were given at the beginning and at the end of each lesson unit. These varied in length from nine to sixteen lessons, and one, two, or three films were used with each unit. The average time spent on seeing the films was 17 per cent. of the whole. The tests were devised to measure the contribution of the films to enrichment, retention, and the creation of interest. The enrichment was analysed by separating the tests into four parts which gave severally questions calling for knowledge of time, historical geography, persons, and of the interaction of events, causal relationships, and the like. Retention was tested by giving these tests a third time. The experiment ran into mid-June, and a retest was made in September. The creation of interest was tested in various ways; trained observers kept detailed records of pupil participation in classroom discussion; the pupils were asked at the end of the experiment to rank History among their other subjects of study; records of the History read outside the classroom were obtained; the amount of voluntary reading done under controlled classroom conditions was measured.¹ The teachers were fortunate in having for use ten of the Yale Chronicle of American Photoplays, a series of films constructed under the auspices of the Yale University Press to illustrate the whole history of the United States of America.² No expense and trouble were spared to make these photoplays accurate and realistic; distinguished Professors of History had given their help as well as skilled producers. This experiment constituted, then, a fairer test of the historical film than the few experiments performed by Freeman with reels on historical subject matter, since, for the first time, the films used were both accurate and artistic.

10. Results of the Knowlton Experiment. These most carefully planned and controlled experiments proved beyond doubt the value of the film for History teaching in the given circumstances. The investigators give as their outstanding findings :—

- “(1) That the photoplays contributed materially to the gaining and retention of worth-while knowledge, particularly of knowledge of interrelationships, other than time;
- (2) That they produced more pupil participation in classroom discussion; and
- (3) That they caused the pupils who saw them to read voluntarily more supplementary history reading material under controlled classroom conditions.”³

Actual figures, “The pupils learned about 19 per cent. more with the aid of the photoplays but retained only about 12 per cent. more,” are given elsewhere in the summary of conclusions.⁴

¹ *Motion Pictures in History Teaching*, D. C. Knowlton and J. Warren Tilton.

² *Ibid.*, p. 1 *et seq.*

³ *Ibid.*, p. 93.

⁴ *Ibid.*, p. 91.

11. **The Historical Association Enquiry.** Obviously these experiments had done much to clear the ground, but far more remained to be done. Philpott's impression of the value of the educational film needed to be tested by an enquiry into its helpfulness for separate subjects. Freeman had inaugurated such work in America, Knowlton had carried this further. English tests also needed to be taken. The conclusions that are true of one country do not necessarily hold for another in such a matter as this, since educational tradition and practice, as well as racial temperament, vary considerably. It was at this stage that the Historical Association decided that an enquiry into the possibilities of the historical classroom film was urgently needed. Their view was the outcome of a watchful interest in educational cinematography extending over some years. In 1922, members of the Leeds branch of the society had written "A Day in the Life of a Monastery," the scenario of a film for semi-recreational use with scholars, to be shown to them after school hours.¹ A shorter scenario on "The Woollen Industry" was published in *History* in 1924.² Correspondence and articles on the whole question of films in school followed.³ A session of the Annual General Meeting of 1926 was devoted to the exhibition of an historical film intended for mass exhibition and class instruction. Discussion on the subject had been held at branch meetings in various parts of the country. Apart from the general question, the problem of the value of the film was felt to be particularly acute in the case of History. There is a temptation in teaching History to use oral methods too exclusively, since the subject so often demands, from its very nature, the exercise of the teachers' full powers of vivid description. The resulting lack of balance between oral and visual methods is probably to a certain extent harmful to all pupils and especially to the "visual" child. Any method of instruction which promised to correct this bias deserved careful consideration. Further, it was considered questionable whether the known body of detail on many topics was sufficiently precise to justify the artificial reconstruction of past scenes which is necessitated in the production of historical films. An enquiry would allow for discussion of the question and for approach to knowledge of the type of film required. The validity of the common objections to the use of films in school might also be tested by trial with existing films. Should the experiments point to the value of the film, the investigation would provide a basis of knowledge for further experiment by teachers and for ultimately building up a body of information on the technique of using films. Moreover, an enquiry by an educational body might assist teachers and producers to arrive at a common understanding and break down, should the cinema prove helpful in school, the vicious circle hindering the production of teaching films.

12. Tentative Conclusions reached by the Association after Examina-

¹ Published in pamphlet form by the Historical Association.

² *History*, January 1924, vol. viii., No. 32, p. 275. *The Cinematograph in the Classroom*, G. T. Hankin.

³ *History*, April 1924, vol. ix., pp. 46-9; July 1924, vol. x., No. 33, p. 114.

tion of existing Films. As a preliminary step, the Council requested the Illustrations Committee to study the main types of historical teaching film in existence in the country. After seeing the films, the Committee presented a report of which this extract indicates the drift: "The Committee have seen enough to realise that a new instrument of incalculable power is now available for the teacher of History. One can refuse to use it, just as the historians of the sixteenth century could have refused to have their books printed. One can be frightened of it and leave it to be exploited commercially, as has happened to the amusement film. One can try to discover its direct educational value, as is being attempted with wireless. But it is useless to pretend that the instrument does not exist."

13. The Institution of the Enquiry. The Council approved of the report, and means of setting an enquiry afoot were considered. Since the Historical Association itself had not the necessary means to finance the venture, the Carnegie Trustees were approached on the matter. They generously agreed to finance the undertaking. The investigator was appointed in October 1928. The first weeks of the enquiry were spent in London, in gaining acquaintance with the literature of the subject and the necessary knowledge of the practical aspects of the enquiry—how, for instance, to handle the machine. Towards the end of February 1929 I went to Leeds, a populous district containing many types of school, where the Education Authority had cordially granted full facilities for experiment and where the University kindly allowed work from their Education Department as centre. The first weeks in the north were spent in devising detailed experiments and in preliminary organisation of the first tests to be attempted in the schools. Through the summer, work continued at Leeds, with occasional journeys to neighbouring towns. The Bradford and West Riding Education Authorities permitted work in their schools, and one longer excursion was made into the Midlands. In August I had the interesting experience of watching part of the production of one of the Altrincham County High School films at the school camp near Dartmouth. In September, work was resumed at Leeds, but during the autumn term a month was also spent in work in the London schools, shorter periods in Bedfordshire and in the East Riding of Yorkshire. Since work was undertaken in all these places, it is evident that the enquiry has served a widely different purpose from that of the other recent experiment on films and History teaching; Professor Knowlton's method of comparing film and oral groups over a long period is ideal from the point of view of thoroughly testing the one type of film with one set of children. The want of a supply of chronologically consecutive films did not permit of the use of such a method here. And the method adopted has the advantage of allowing a purview of the possibilities of the film in widely different circumstances. Observation has been made of the effect of the film on all types of scholars, in various parts of the country, in industrial and agricultural areas, in towns and villages. In

these districts, work has been done in 52 schools of varying types, in Elementary Schools, both those in which the children are drawn from poor and from comfortable homes, in Central and in Secondary Schools. Boys and girls have been taught, scholars of all ages from 7 to 18 years of age.

14. **The Films used.** Further, emphasis has been laid during the enquiry on the exploration of the problem of the best type of film for school use. For the experiments, films of varying character were used. In acquiring the films very little choice was possible; those used represent practically all the available types of material in England, and they differ considerably in teaching value. A detailed description of each film is given in Appendix A; a general account follows.

(a) **THE PEOPLE OF THE AXE.** This is a short one-reel film acted by the boys of the Altrincham County High School, under the direction of one of their masters, Mr. Ronald Gow, who also wrote the scenario. The late Sir William Boyd Dawkins, M.A., F.R.S., gave his advice and vouched for the general accuracy of the film. The reel gives a picture of the New Stone Age, shown as a day in the life of a boy, Fleet. The village is shown with the people at work, making pottery, baskets, mining, tending sheep. A pedlar comes with flint weapons. The story of Fleet's first kill is given and the evening feast.

(b) **THE PEOPLE OF THE LAKE.** This is a slightly longer reel, taking 18 or 20 minutes to show at natural pace, and written, produced, and acted as was the first film. It describes the dream visit of a modern Boy Scout to a lake village of the Bronze Age, showing the houses and dress of the people, occupations, such as the making of bronze weapons, and attack by a neighbouring tribe and the villagers' defence.

(c) **ROMAN BRITAIN.** This film of three reels consists of a series of cuts from the picture-house film, "Boadicea," rearranged for teaching purposes by British Instructional Films Ltd.

Reel I. : The Britons at Peace. This is a picture of Britain in A.D. 43. Pictures of a village are shown, with the people harvesting, hunting, basket and pottery making. The interior of a chief's house is shown. The chief is ill and dies. Mourning ceremonies are depicted, and a religious festival in the forest.

Reel II. : Roman Civilian Life. We are shown the outside of a town, with an excellent view of the drawbridge. There follow scenes in the forum, basilica, baths, a triclinium scene, the raising of the drawbridge at night, and the sentries left on guard.

Reel III. : Romans and Britons at War. A Roman general reviews his troops before they set out on the march, of which incidents are given. A British chieftainess calls on her people to rise. They collect in the forest and a battle ensues. The equipment and tactics of the armies are pictured.

- (d) **WOLFE AND MONTCALM.** This is one of the Yale Chronicle of American Photoplays, already described in paragraph 9. It was kindly lent to the Historical Association by the Yale University Press for the purpose of this enquiry. The Quebec campaign is pictured. Pitt discusses the situation with Anson. Wolfe is sent overseas. The situation of the French in New France is indicated, the jealousy of the Governor-General, Vaudreuil, for General Montcalm shown. Then follows the landing at the Foulon, the battle, the occupation of Quebec, the relief of the British by the navy in the following spring, and the final surrender of the French at Montreal in September 1760.
- (e) **NAVAL WARFARE, 1782-1805.** British Instructional Films Ltd. made this film of two reels from cuts of a picture-house film, "Nelson." It was envisaged purely as a revision film for use with Senior Forms of School Certificate standard. The film gives a chronological account of naval events from 1782 to 1805, the treatment being diagrammatic rather than pictorial, though some scenes of life on board are shown. Treaty changes and routes are indicated by animated maps of different types, and battle tactics demonstrated by the device of model ships. Nelson appears in some scenes, *e.g.* at St. Vincent, Copenhagen, and Trafalgar.
- (f) **THE WORLD WAR AND AFTER.** This long film of four reels was produced under the auspices of the League of Nations Union, and was intended primarily for mass showing to school children in combination with preliminary and later lessons. Part I. deals with the cause and extent of the war; Part II. with its results, the killed and wounded, the permanently disabled, destruction and famine in Central Europe, debts, changing frontiers. Part III. describes the inception and organisation of the League, how expenses are met, and contrasts the cost of war with the cost of the upkeep of the League. Parts IV. and V. give examples of the work of the League in preserving peace, the account of the Åland Island and of the frontier dispute of Greece and Bulgaria being given in some detail. Maps and diagrams are used along with scenes of actual life, the latter being chiefly extracts from the contemporary Pathé Gazette or official photographs supplied by the various Governments, etc. Difficult political situations are explained by simple illustrations from everyday life, *e.g.* frontier disputes and their settlement by a quarrel of neighbours over their garden boundary.
- (g) All these films were of non-inflammable material and of standard width.

15. The Apparatus. The projector employed was a Houghton Butcher, Number 5, Empire Model machine, which threw a picture five feet by six feet, the size of the whitened linen sheet carried, at a distance of eighteen feet from the screen. It is easily possible to get this length of throw in the ordinary classroom. A bigger picture can be obtained with the same machine, which can be used up to a distance of fifty feet from the screen, by taking a longer throw and substituting a more powerful lens. This projector was found to give a clear picture, and has the distinct advantage for school use of allowing stoppage of the film at any point desired. Darkened rooms were necessary, a difficulty in modern, well-lighted schools in the absence of a room with fitted blinds. In many cases the experiment was only made possible through the enthusiasm of the school staff and not least through the goodwill of the school caretakers, who worked wonders with ladders, hangings, and brown paper at the cost of a considerable expenditure of time. On the day of the experiments, the apparatus was fitted up in each particular school in the room already prepared. The infinite trouble taken by the schools all over the country to make the experiments successful from the point of view of projection is an indication of the feeling of the teachers of the necessity of investigating the scope of the cinema as an educational instrument. It took almost an hour to hang the screen, fix and thread the apparatus, and half an hour to take it to pieces again. None of this work would be entailed if the projector were permanently fixed in a school in a room fitted with dark blinds.

16. The Advantage of Conducting the Experiments in the Schools. The trouble of carrying the apparatus from school to school and erecting it several times each week in a strange classroom was compensated by the evidence afforded that any average classroom is suitable for film showings, provided some system of ventilation is arranged, and by the fact that the children had the film lessons in conditions altered as little as possible from those of ordinary school. The teachers were careful to treat the experiment as a normal lesson, so minimising any excitement felt by the children at the novelty of a film in class. It was borne in mind throughout the enquiry that, should projectors be installed in the schools, the individual teacher would normally be alone with the class while giving film lessons. Consequently, no procedure was adopted impossible to a teacher in these circumstances. From this point of view, the experiments were practical demonstrations of practical possibilities. I operated the projector and made all the comments given while the film was in progress. If the film was stopped for examination of a map or some such feature, this was looked at without the help of a pointer, or I went to the screen myself and indicated the necessary detail. When a pause was necessary for threading a new reel, one pupil put on the lights and the scholars were generally told to talk to each other about the previous reel till I was ready. A reel took from two to four minutes to thread. The children were not averse to these interludes. I was generally making too great

haste to restart to catch any of the conversation plainly, but it was always animated and always seemed to be, according to instructions, on the film. It ceased immediately, often with pleased exclamations of " Oh " from younger classes, as the first caption of the new reel appeared on the screen. In the formal experiments, where the teachers did not need to observe the response of the children, I was frequently left alone with the children, and never, during these enforced short pauses or at other times, had disciplinary trouble. Even granting that scholars naturally uphold the honour of the school before a visitor, the criticism that the difficulties of darkness and pauses in a film lesson make for laxity of discipline, appears to be unfounded ; the interest of the scholars is too engaged in the film.

17. The Film is an Aid, not a Substitute. In all the experiments, the film was used as a possible, additional aid to existing methods, a supplement to oral instruction and established types of visual illustration, an absolute substitute for none. It is absurd to assume that, should the cinema be installed in school, it will oust all other methods of instruction.

18. Formal and Informal Tests. Two distinct types of experiment have been used during the enquiry. In the first, for convenience called " formal " throughout this report, lessons were given to equated groups under rigid time conditions. For instance, when the experiment was simply to compare the value of the film as a visual aid with more classic types of illustration, the experimental group saw a film during the course of the lesson, the control group did not, but both groups spent the same amount of time on their study of the topic concerned. These formal experiments were undertaken because they provided an easily recognisable standard of comparison for the results of the film lessons, and took into primary account the question of time. In the second place many " informal " tests have been given, where a film was shown to a whole class, and the results estimated, not by comparative results from a control group but by the judgment of the class teacher. The second type followed from dissatisfaction with the formal tests as a means of evaluating the contribution of the film. In Chapter III. the formal experiments are first described, and, from a discussion of the results obtained, the reasons for undertaking the second kind of experiment are indicated.

19. Films shown to Adult Classes. Such tests continued until the end of December 1929. The last few experiments, in the first weeks of the current year, 1930, were taken with adult classes, for it seemed possible that the film might prove an ally in the wide field of adult education. The following chapters embody a report on all the work. In the first place, before starting to show the films in the schools and attempting to evaluate results, it is obvious that I had to resolve anew for myself the problem : " Why teach History in the schools at all ? "

CHAPTER II

THE AIMS IN THE TEACHING OF HISTORY

20. The Views expressed are a Personal Statement. The views expressed in this chapter are a statement of the position reached as the result of some years of History teaching and of attempts to face the doubts which from time to time assail all teachers as to whether their work is justifiable in any ultimate sense. Since these views are purely personal, and the report as a whole is a personal narrative, the first person is occasionally employed throughout, when such a usage makes for clarity.

21. The Value of History in School is to induce a certain Habit of Mind. In the Elementary School, where most of the children leave at the age of 14 to take up some practical calling, the problem of the teacher is how to present the subject of History so that it is of permanent value to all those scholars who will not be leading academic lives. Can a boy have gained anything from the study of History when he leaves school at the age of 14 or even of 15? It is an early age to quit so pre-eminently adult a subject, needing for its full comprehension mature powers of judgment and intellect, but even so it is possible for the subject to have by that time induced in the child a certain habit of mind. And the outlook engendered by the study of History was never more needful than it is to-day. For the solution of the problems of this time of transition the great qualities needed are loving-kindness and intellectual honesty, a love for mankind that impels to service, a clarity and honesty of mind that, setting aside prejudice and preconception, can reach to the root of things and serve rightly to direct the goodwill. All education should subserve this ethical and intellectual end. History is well fitted for the double task.

22. History, by developing the Child's Imaginative Powers, increases his Sympathetic Insight. When a child hears the stories of earlier days, he is drawn out of his narrow, childlike concern in his own affairs. His horizon widens. His thought projects itself into the lives of others. He is led to imagine the circumstances of men of other times and country, to realise to some extent their thoughts, to understand something of their endeavours, triumphs, defeats. From his excursions into the past he learns that human compassion, that power of imaginative, sympathetic insight into the lives of others that he needs if he is not to remain cold and unhelpful in the midst of modern affairs. But for this to happen, the child's imagination must be vividly awakened to the past, the people

of bygone ages must be made to live. Can the film, then, help in this important aspect of the teaching of History, in the stimulation of the child's historical imagination, when this is interpreted to mean his power of imaginatively realising the past and of identifying himself with the thoughts and feelings of men of other times? ¹

23. The Study of History engenders a Spirit of Social Responsibility. Further, the child should realise from his History lessons both the mutability and continuity of human affairs.² Perception of the first is of moment, though the notion of continuity should hold pride of place. Clear realisation of the impermanence of the existing order of things is a powerful solvent of conservative prejudice, a factor in preserving a due sense of perspective and proportion. No labouring of these points is necessary in school. The children naturally and easily realise that no state of society is constant, for men have differed in every age of which they learn, in homes, in dress, in modes of thought. But a development is discernible. The accidental impinges on the course of events, progress is not orderly, gains in some directions through the ages are balanced by loss in others, absolute progress is held in doubt, but the story of human endeavour is not unworthy nor is the endeavour fruitless. This present state like the rest will pass; the man of the present should pay his debt of gratitude to the past by building for the future. The kindling of the child's imagination to the past and his realisation of the continuity in human affairs work together in fostering this sense of obligation. For a knowledge of continuity will not of itself awaken the child's feeling of responsibility towards the future unless he has learned to love mankind. Will the film help here?

24. School History is an Introduction to the Study of Human Nature, but only in a limited sense. The study of History serves, then, to develop the goodwill, the loving-kindness postulated as the first necessity of the age. It also helps to train honesty of thought. Power of forming critical judgments, impartiality, tolerance, should emerge from the critical study of many particular events. Too much must not be expected in this direction from the child. It is the cumulative effect of long study. Even the children at the top of the Elementary School are not old enough to make more than the simplest judgments on character. Judgments they will make, whether the teacher wishes or no, and, while it may be true that the judgments of youth are hard, school children of 12 to 14 years are reluctant to damn a character entirely. "But he wasn't all wrong," they will say of even so famous a school villain as John, "he hurried up to Mirebeau." There is no child but will eagerly find for Charles I. extenuating circumstances in his failures to keep faith. It is not beyond the understanding of children of 13 that William the Conqueror was a great

¹ Cf. C. B. Jarvis, *The Teaching of History*, pp. 21-3; W. H. Woodward, Essay on "The Teaching of History in Schools" in *The Teaching of History*, ed. Acton and Archbold, p. 70.

² Cf. Board of Education, Educational Pamphlets, No. 37, p. 53.

king although he administered the Forest Laws severely, nor that Elizabeth could be at the same time unscrupulous in negotiation and a mighty lover of England. This is all on the simplest plane. The subject matter of History may be the stuff of life. It may be possible to acquire from it "the habit of judging men's thoughts and feelings through their acts."¹ But its value in the Elementary School as an introduction to the study of human nature is rather that the child is thinking about the doings of men, having his sympathies drawn out to them, than that he is gaining insight into the complexities of human character. It is more important at this stage that the child should be stirred by tales of heroism, moved by the patience of the unknown workers—the mediæval villain in his dreary round of toil—by the beauty of noble characters. Still, at the age of 14 or 15 when the child leaves school, mature human nature is far beyond his understanding.

25. The Testing of Evidence. Similarly, it is only in a very tentative way that children in the Elementary School can learn from History the necessity for the rigid testing of evidence.² It is often difficult to know precisely what is meant when this phrase is used with reference to school children. It may be taken to relate to the actual historical subject matter of their lessons. How do they know that these facts are true? The question cannot be ignored in school. Modern schoolgirls seem often sceptical as to whether the History they learn is more than legend. They voice their doubt in class. It is possible to establish in the children's first lessons on primitive man that there are different kinds of historical evidence, literary and archaeological. The impression can be strengthened at intervals during the following years by reference to contemporary archaeological research, in which children are invariably interested, as they are in any local remains and antiquities. They find romance, too, in such ideas as that of a monkish cellarer entering his accounts in the fourteenth century and his registers being found and used to-day. Children enjoy elementary talks on sources, but it seems inadvisable to go further and introduce the difference between legend, chronicle, and record. At this stage it is only likely to cause mental confusion in the child, and a distrust of all accounts. Let the child realise that there is some original source behind the stories in the text-book, the care taken to authenticate the details. The rest is for the more mature. But even this slight acquaintance with the sources of the material of his lessons will reinforce the effect of the subject matter in inducing the historical habit of mind that looks to origins for the explanation of the present; it is a way of thinking of much value in all fields of activity.³

26. The Training of Judgment can be tentatively begun. Or such

¹ *Report of a Conference on the Teaching of History in London Elementary Schools*, p. 28.

² Cf. C. B. Firth, *The Learning of History*, pp. 10-11.

³ This aspect of the subject is discussed at length by J. J. Findlay, *History and its Place in Education*, pp. 13-26.

phrases as "the search for evidence" may refer more generally to the opportunity afforded by History lessons of discussing matters of opinion. Again, breadth of judgment cannot be expected, but quite young children, certainly those of 13, readily accept a dictum from the teacher that there are at least two sides to every question. The phrase can usefully become almost a humorous slogan of the History lesson. The children then at all times relish trying to discover the two sides of any new topic of discussion. A boy of 15 who leaves school with the phrase well implanted in his mind, a phrase made meaningful by memories of class discussions, has already gained some faculty of facing new problems with detachment and of forming an unbiased judgment on them.

27. General Conclusion on the Attitude formed. A successful History course, then, will ensure that a boy of 14 leaves school fired with a real love for humanity, disposed to look at things in the historical spirit, and to meet problems with an open mind. It is an equipment for his personal as well as his public life. This attitude will have grown unconsciously, the result being achieved, not by any direct suggestion but by the awakening of the imagination toward the past, by giving a sense of continuity in human affairs and therefore a feeling of responsibility, lastly by awakening incipient powers of judgment, at once critical and tolerant, on men and things. All this arises out of the study of certain historical events. Everything depends on the way these facts are apprehended. They should be taken in chronological sequence in the last few years before the boy leaves school, or the notion of continuity will not otherwise be gained. Above all, they must be invested with life. During the past year, I have asked many non-academic people of ages ranging from 30 to 65, what they remember of their school History and what use they conceive their school History to have been. Dramatic stories stand out chiefly in their minds, those learned in the earliest days—Alfred and the Cakes, Harold at Hastings, Bannockburn, Joan of Arc, Henry's plethora of wives. But several of them said that though they have forgotten most of what they knew, they were glad to have been taught the further matter now slipped from them, for a sense of tradition, a notion of cause and effect and of continuity remains. Memory of the separate facts is no vital matter from the point of view so far described in this chapter, if the impression, the outlook, remains.

28. A Memory of Historical Facts gives Richness to the Personal Life. At the same time, from another aspect, the more the child remembers the better, for the study of History should lend richness to the individual life. As we cannot understand the big things of the present, the institutions of Church and State, the relations of England and the Dominions, the existing problems of government, save in the light of the past, neither can we otherwise extract the full flavour from many smaller things. "Happy is that boy who can people the fields and lanes of his home with the figures of the past; can hear the clatter of Rupert's horsemen down

the village street,"¹ and there are many who do not so easily see the past stirring about them who yet derive much pleasure from the knowledge, instinct with the romance and colour of the past, which is part of the readily recalled furniture of their minds. But History brings into life a wealth of interest even for the more prosaic. It invests old buildings with full significance, gives to local customs an interest, to names—Druids' Altar for piled rocks on the moor—a richer meaning. Folk-song and national music, Purcell's melodies, are more appreciated, the historical novel genuinely enjoyed, the many historical allusions in paper, book, and play thoroughly savoured. For all this, some outline of historic fact needs to be retained. The ruined abbey is more interesting if you can remember the general monastic plan, know which Cromwell was responsible for its dissolution. This aspect of the subject becomes increasingly important, and especially so in the Elementary School, as the working life of the people engaged in mass production grows more and more monotonous. Since little interest can attach to such work, the mere automatic tending of machines, it becomes more necessary every year to educate for the interesting and happy use of leisure. Even a slight knowledge of History adds colour to everyday life, and some of its branches, the study of architecture, heraldry, of memorial brasses and the like, lend themselves well to erection to the dignity of regular hobbies. It is as important that the child should be introduced to these recreational aspects of the subject in school as that he should be given some acquaintance with the machinery of both local and central government to fit him for his share in civic life. Can the film help boys and girls to remember what they have learned?

29. The Problem in the Secondary School. In the Secondary School the problem is much the same, save with those pupils who remain after the School Certificate age. But with every extra year at school comes increased power in critical work. More training can be given in the sifting of evidence, scope offered for the formation of judgments. The more purely intellectual aspects of the subject can be the better stressed.

30. The Importance of the Method of Presentation. The History teacher works through the handling of a certain body of information. What that information shall be, the individual school decides. Choice is partly conditioned in the Secondary School by the syllabuses of the external examinations. The general practice in the Elementary School is to give in the last, four, school years a chronological survey of English History, with reference to such European developments as concern the national history and regard to the development of the Empire. The method of its presentation is the teacher's primary concern. How can he present it so that certain main features, though not a mass of detail, are well realised and well learned, since to acquiesce in half-learning of essentials may tend to induce a habit of slipshod thought in the child?

¹ C. R. L. Fletcher, *Introductory History of England*, preface.

How can he make his subject matter vital and glowing, how lead the children to exercise their own thought upon it, since the more their own activities are called out, the greater is the growth of their powers, the more lasting the impression made by the material? Can the film help in all this?

31. The Creation of a Permanent Interest in the Subject. Moreover, the teacher is fundamentally concerned with the question of interest. History may make intelligible the whole of life,¹ train the social virtues, be a source of interest and pleasure to the individual. But much of its subject matter is beyond the scope of the child. Even if it were all fully within his comprehension, a scholar cannot learn much in the few years he is at school. A first aim of the teacher should consequently be to create an interest in the subject so strong that it remains when school days are done, an interest differing from that of the historian in his subject matter as the interest of a layman in pictures differs from that of the artist, yet a real and pleasurable interest none the less. It is not to be expected that the average boy and girl in their teens, the average workman and housewife, will wish to spend their leisure reading abstruse works on the mediaeval chancery or learning extra facts from books of the text-book type. But, over and above enjoying the historical novel, they could get both pleasure and profit from reading books like those in the Golden Hind series, biographies, attractive pictures of social history like Miss Eileen Power's *Mediaeval People*, and similar publications. The creation of such an interest is not cognate with rousing a liking for History lessons in school, a comparatively easy matter. It is far harder of attainment. As far as my experience goes, it does not seem that many of the scholars who pass straight from the Elementary School into mills and workshops, nor from the Secondary School into offices, spend much time in reading for pleasure even the most popular of books on subjects connected with History. Nor does one wonder. Apart from the fact that insufficient, initial interest has been roused, the fare provided has for long been somewhat unpalatable for those without a lengthy historical training. To-day, the supply of books, popular though sound, is increasing. Tastes naturally differ. Some will not be strongly interested in History, however well they are taught. But teachers are failing in their work if a desire to read what may be called the "layman's" type of History after they have left school is not present in a fair proportion of their scholars. Can the film help to create such a permanent interest?

32. Criteria for the Test of the Film as an Aid to the Teaching of History. It follows that the test of the film as an aid to the teaching of History resides in its helpfulness in these four matters:—

- (1) The giving of life to the past, the creation of sympathy for its people, and the stimulation of the constructive imagination.

¹ Cf. E. L. Hasluck, *The Teaching of History*, p. 1: "A knowledge of History interprets and illumines the whole of human life."

- (2) Training the child to think honestly and regard new problems with an open mind.
- (3) The creation of a permanent interest in History.
- (4) The learning and remembering of historical information.

33. The Practical Scope of the Enquiry. With these ideas as touchstones, the investigation resolved itself into an enquiry upon :—

- (1) The extent, if any, to which the film helps in teaching History in the various grades of schools and with pupils of all ages.
- (2) The best method of using the film, *e.g.* as an introduction to or summing up of a topic, in silence or with oral commentary.
- (3) The type of film most useful, both as regards subject, form, and length.
- (4) The practical considerations involved in the installation of projectors in schools.

CHAPTER III

THE FORMAL EXPERIMENTS COMPARING LESSONS WHERE FILMS WERE USED WITH USUAL LESSONS

34. The Sets of Scholars Tested. 504 children took part in these tests. Since it was felt to be important to test the film under varying conditions, the following eight sets of children were chosen from seven different schools :—

Set.	Type of School.	Average Chronological Age.
A	Girls' Elementary School in a poor district .	10 years 11 months.
B	Corresponding Boys' Elementary School .	11 years.
C	Girls' Senior Elementary School . . .	13 years 2 months.
D	Corresponding Boys' School . . .	13 years 3 months.
E	Boys' Elementary School . . .	12 years 3 months.
F	Girls' Secondary School . . .	12 years 11 months.
G	Boys' Secondary School . . .	12 years 8 months.
H	Boys' Secondary School . . .	14 years 10 months.

In all but two of the sets rather more than 60 children were concerned. In Set B and Set E there were under 50 children. In the sets the children were divided into three equated groups by means of an intelligence test, the "West Riding" tests of T. P. Tomlinson being used. This grouping allowed for working with classes of 20 children¹; in Sets B and E only two groups were formed. It was not considered necessary to test the children's previous knowledge of the subject matter of the films. In few cases could the topics be entirely new to any school children over the age of 10, but the children in parallel groups had received the same previous formal instruction.

35. Type of Experiment: Experiment 1. The two following experiments were performed with all sets save Set E, with whom the first experiment was omitted.

Experiment 1. To assess the value of illustrations in the teaching of History.

GROUP I. A purely oral lesson.

GROUP II. Oral + Blackboard + Still Pictures + Film.

¹ Occasionally the number dropped to 19 or 18 owing to the absence of pupils, though allowance had been made for this by testing more than the number necessary. In these cases the necessary mathematical correction has been made in calculating statistical results.

This experiment has less relation to actual school practice than any of the subsequent tests. It was regarded as a preliminary exploration of the ground, not as a comparison of oral and visual methods of instruction, but as a possible means of providing corroborative evidence of a more statistical kind for the value of History pictures, whose use has rested mainly on an empirical basis. Weber cites experiments on the value of pictorial representation for developing a composite mental image and a series of abstract concepts.¹ This experiment has more bearing on general educational practice, several illustrations being shown in the course of a lesson instead of one being taken as the centre of instruction.

36. Experiment 2. This experiment was to compare History lessons where the present established aids are used with History lessons making use of these aids and in addition of a film. It was repeated at least twice with all groups, and tested the film for two somewhat different purposes.

- A. For its value in building up the picture of a long period, for supplying social background. In this case the comparison between the two groups can be expressed thus :—

GROUP I. Oral + Blackboard + Still Pictures + Models.

GROUP II. Oral + Blackboard + Still Pictures + Models + Film.

- B. For the value of an " Incident Film " as compared with a " Dramatic Narrative." The groups fall into this relation :—

GROUP I. Oral : Story told : Minimum possible use of blackboard.

GROUP II. Film.

37. Experiments in the Technique of using the Film. In Schools A, C, D, F, G, H, two experiments to find the best method of using the film were performed with the addition of a third equated group, to whom the same intelligence test had been applied. In Schools B and E it was impossible to have a third group of the same age and standard, but in School B a comparison of different ways of using the film was made between two groups. Often the type of film must dictate the order of its appearance in the teaching of a given subject. Occasionally, this would appear optional. It was for such cases that the following experiments were planned.

Experiment 3. To find whether the second showing of a film increases its efficiency, no more than the usual time being allowed

¹ J. J. Weber, *Comparative Effectiveness of some Visual Aids in Seventh Grade Instruction*, pp. 50-63.

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for the topic, which was therefore treated less fully orally with Group II.

GROUP I. Film+Oral	} Time equal for all groups.
GROUP II. Film+Oral+Film	
GROUP III. Oral+Film	

Experiment 4. To compare the following methods :—

GROUP I. Oral+Film.

GROUP II. Film+Oral.

GROUP III. Films interrupted and accompanied by oral commentary.

38. Evaluation of Results. The groups were tested on the day following the experiment. Usually four questions were given. *A*, a drawing test, was included as an effort to prevent a visual method of instruction being tested by purely verbal means. With *B*, a short-answer test, it aimed at discovering what information the children had gathered. All the questions were concerned with points of definite value as historical information. *D*, a short essay on a given subject, was set to test the place of the film in giving life to the past, in helping children to form historical judgments and to educe relationships. Test *C*, asking for the points which had specially interested the children, was given to discover the kind of thing in a film that seizes the children's attention, as being some indication of what type of historical film would be of most value in the classroom. The times usually allotted to the various tests were : *A*—10 minutes, *B*—10 minutes, *C*—5 minutes, *D*—15 minutes, the total time being that of an average lesson period. It was felt that boredom and fatigue would set in if longer were given to children for one test on the same subject matter. The event proved that longer time was needed for Test *D*, and this was allowed after the first two tests. Certain conditions were observed in the writing of all the tests. A scholar could begin the next test as soon as he had finished the preceding one, but he had to stop any test on the supervisor's signal, *e.g.* "Time to start Test *B*." A pupil who finished Test *D* before time might then complete others left unfinished.

39. The Essay Marking. Only one mark was given for the essay in the immediate tests. This was a quantitative assessment, each fact relevant to the answer being given one mark, the highest score in each school being taken as the maximum for the two groups. It had been planned to give a double qualitative mark to these essays, the first score for grip of essentials, the second for atmosphere. Actually, no difference in atmosphere could be discerned in the answers of any two comparative groups. The essays were short, bald statements of such items as each child remembered. Time was evidently too limited for more. To mark for anything save the number of points given would have been untrue to the facts. Extra time was allowed for the longer question in the later

experiments, and most of the children also gained time for Test *D* by speedy completion of Tests *B* and *C*, but in spite of the slightly longer period allowed, the essays changed little in type. The form of test was entirely changed in Part B. of Experiment 2, where "Incident Film" and "Dramatic Narrative" were concerned. Since Test *D*, the essay test, had been inserted as a means of detection of gains over and above the purely informational, it was essential to try if its failure was due to the short time allowed, before presuming the inadequacy of the essay test for its planned purpose.

40. The Delayed Tests. Retention of fact and impression was tested by further written papers taken at intervals of from one to seven months after the lessons. Before the first of these delayed tests was set, the insufficiency of the immediate tests was apparent. The difficulty in finding a satisfactory test lay largely in the many-sided nature of the enquiry. It was desired to test the film as regards its help in stimulating imagination, thought, and interest, and in giving information. At the same time some indication was sought of the most useful kind of historical film. A combination of tests had been tried to bring out these points. But it was felt that the spontaneity of the essays, essential if they were to be an indication of the type of film desired, was hampered both by the short time allowed and by the preceding, short questions. Further, definite questions rather than a free essay had been set, since the former seemed a better means of testing the child's awareness of certain aspects of the subject matter of the lessons deemed important by the teacher. It was conceivable that the film might give the child such clear-cut mental pictures that he could quickly select from among them the pieces of information needed for his answers. It appeared in the event that this was not a good test of the contribution of the film. Many children who answered well in class and wrote vivid short descriptions of the part of the film which interested them, were baulked by the greater intellectual difficulty of the questions posed. When the scholars' thought was forced along particular and perhaps uncongenial channels imposed from outside, they were in large measure prevented from setting down on paper the real impressions they had gained from the film. Consequently, it was decided to give the children all possible freedom in the delayed tests. They were asked: "What do you remember of the film? Put down your ideas in any order just as you think of them." This was viewed partly as a measure of the relative appeal of various parts of the films, since the children would be likely to remember first the incidents by which they had been the most impressed.

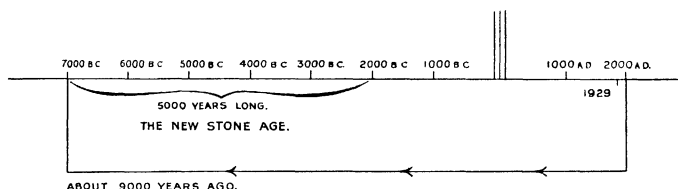
41. Marking the Delayed Tests. It was felt that the quantitative system of marking used for the first essays, though adequate as a measure of observation of the films, merely touched the fringe of the problem. Each point noticed is not of equal importance from the point of view of

History teaching. In an account of the film of Wolfe, the statement, "The French wore white coats, the English dark ones," is not of the same value as the information, "The English could land at the Foulon because it was not strongly guarded." Grip of historical realities and a feeling for the period is of more moment than any recital of incidental and unrelated points, however long. The method of marking common amongst teachers offered a guide. The round mark or grade generally given by the History teacher represents an assessment primarily for knowledge of the main points of the topic set, to which a mark or so has been added or subtracted in consideration of style and of that something more, recognisable but indefinable, which differentiates the essay of the pupil who has gained an insight into a topic from those who have merely learned about it a number of facts. A method akin to this but somewhat more precise was adopted. Grammar, spelling, and so forth were ignored. Each essay was given a round mark for "Grip" and again for "Atmosphere" or "Spirit," the marks under each head being kept discrete. The score for grip depended on knowledge of the main facts, on a balanced realisation of the whole subject of the essay. That for atmosphere is more difficult to define. It registers an opinion as to whether the lessons had made any impression over and above the transmission of a series of facts, whether the matter treated had become living to the child. Its fair assessment was extraordinarily difficult. An author, judged skilful at creating atmosphere, receives this recognition for his ability to convey to others the spirit of a place or epoch. The power appears very largely to reside in the indication of significant detail and in gifts of style. A child's essay should be judged from a different standpoint. The question is not whether he makes a scene living to others, but is it living to himself? The quality has to be sought in spite of, and through, a child's inability in expression, though often it seems to be marked in a scholar's essay by a certain vigour and directness of statement, a naturalness of expression apart from grace of style. Again, the question arises as to how far completeness of description is of moment in this connection. If a child, for instance, vividly describes one or two incidents of the Roman Britain film, so that it is apparent that the Romans are real to him, does he merit high marks for "atmosphere," despite his ignoring of the bulk of the lesson? Can one call the incident of the capture of Quebec "alive" to a child who spends all his available time in describing the ascent of the cliffs, even though his imagination has obviously been fired? Should the standard be insight into the whole period or incident, or merely the coming to life of the persons of the story, in however small a number of episodes? A balancing of the two notions seems to be essential; the scales, in this case, were weighted in favour of the second view. Incompleteness did not lead to loss of marks for atmosphere—the essay had already been marked for "grip of essentials"; nor did slight confusion over details. Extreme brevity or complete confusion was penalised, for in an essay thus characterised neither the period, the story, nor the people could be said to live in any true way.

42. Delayed Tests of School H. Delayed tests were given to Set H, boys aged 14 years 10 months, as to the other groups, but so many boys had left from one group before the test was taken that these delayed results, though valuable in other connections, cannot be quoted as indicating differences in powers of retention between equated groups.

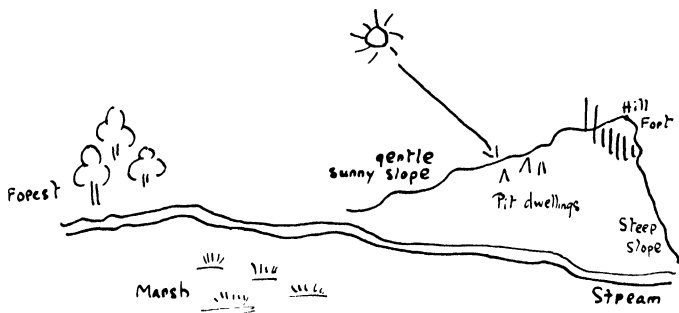
43. Detailed Account of these Experiments: The Films used. A serious handicap in working with these groups was the small supply of films. Neither "The World War and After" nor "Naval Warfare" were suitable for this type of experiment, the one from its length, the second from its nature, since it is purely a revision film. Only four films remained. The fact that the Roman Britain film was in three reels which could be shown separately partially solved the difficulty, but the scenes in Reel II. of this film are so brief that the reel by itself is a weak medium for experiment. The same film was deliberately used for the same experiment with five of the groups to discover its effect under different conditions. Different reels were used for Experiment 2 with Sets D and E, since it was important to try this experiment with as many reels as were available. The films were taken with the children in their chronological order.

44. Experiment 1: The Lessons. This experiment was conducted in the same way with Sets A to D, the film "People of the Axe" being used. The lessons lasted 40 minutes. With the film group, the first 28 minutes were spent on an oral lesson, the last 12 on the film, which was run straight through without comment. An attempt was made to build up a picture of the Stone Age as a whole, touching on any essential points, not merely those dealt with in the film. The date, "We are going to talk of the people who lived 9000 years ago," was fixed by means of a rough time line shown on the blackboard.



This point is made because of the view that the use of the film will interfere with the child's sense of time relationships. How do we know about these people? Follows a reference to excavations, the reason for the name of the age, the gradual progress towards civilisation, the difference in weapons of Old and New Stone men, a discussion of their appearance, dress, homes, and occupations. This was a discussion lesson, not a lecture. A blackboard summary was made of the main points. The

children were shown at the appropriate times in the lesson charts showing the exterior and plan of a long barrow and of a pit dwelling, and pictures of the implements of the age. When discussing the site of the pit dwellings, the following diagram was built up on the blackboard as the necessary points were arrived at by the class :—



Quick blackboard sketches were also made to show the advance of hafting.



The non-film group were given exactly the same matter, taken as the story of a day in the life of a boy of the New Stone Age, the class being encouraged to supply from earlier information, or to work out together, as much of the detail as possible. They had no visual illustration of any kind, not even a blackboard summary. Sets F and G had 45 minutes for the lessons. The same procedure was followed for Set G, but the longer period allowed time for 5 minutes' discussion at the end of the lesson after the film had been seen. In Set F the experimental group was treated differently. After the date and extent of the Stone Age was fixed by drawing the time line, the film was shown at once, and rather more slowly, so that it took 15 minutes to go through. The children's attention was drawn to many points as they appeared on the screen, e.g. "Notice this barrow, one of their graves"; "Notice the huts, they are dug out inside." The last 20 minutes was spent in a discussion lesson, the children being able to give almost all the data wanted on the period from their observation of the film. They were shown the same still pictures as the other groups as the points came up in discussion. They provided full information on the sort of site chosen for a village from their observation of the film.

45. The Test for Experiment 1. The following test was given to Sets A to G on the next day :—

Name School

Age..... Years..... Months.

TEST FOR FILM—"PEOPLE OF THE AXE."

(Total Time—40 minutes.)

Do not bother about writing and spelling in your answers.

Test A. Time—10 minutes.

Marks are given for the number of points shown, not for skill in drawing.

Draw :—(1) A diagram of a pit dwelling, showing the inside.

(2) An axe of the New Stone Age.

(3) An arrow-head of the New Stone Age.

Test B. Time—10 minutes.

Answer the following questions in the order given in as few words as possible. One word will do.

Questions.

Answers.

- (1) About how many years ago did the New Stone men come to Britain ?
- (2) What were the two chief ways in which their weapons were better than those of the Old Stone men ?
- (3) How have historians learned of the life of the New Stone men ?
- (4) What did men of the New Stone Age hollow out to make canoes ?
- (5) How did Fleet wear his hair ?
- (6) In what did he dress ?
- (7) What three kinds of domestic animal did his tribe possess ?
- (8) Were their sheep larger or smaller than ours ?
- (9) What did the New Stone men use for a pick-axe ?
- (10) What did they use for a spade ?
- (11) What food did they find on the sea-shore ?
- (12) What did they use to remove hair and flesh from the skins ?
- (13) What tools did they use to shape pottery ?
- (14) How had Fleet to get through the door of his hut ?
- (15) Of what were his mother's needles made ?
- (16) What did she do to the skins before making a stitch with her needle ?
- (17) How did his father break off small flints from a large stone ?
- (18) How did Fleet fasten his arrow-head to the shaft ?
- (19) Did his tribe eat raw meat ?
- (20) How did they pass the time after work ?
- (21) Had the New Stone men coins ?
- (22) About how long did the New Stone Age last ?

*Put your name on your lined paper.**Test C. Time—5 minutes.*

Did you notice any other points which seemed interesting to you in the film or lesson.

*Turn over your paper.**Test D. Time—15 minutes.*

Write a short essay to answer the question: "If you were a man of the New Stone Age, where would you build your village and your hill fort, and why?" Give as many reasons as you can.

46. Immediate Results with Pupils aged 10+.

Set.	Group.	Marks.	Drawings.	Short-Answer Test.	Essay.
A	Film	Average per cent.	75.78	66.94	47.36
		Midscore ¹	80	68	50
		Q ₃	100	80	60
		Q ₁	50	52	30
	Non-Film	Average per cent.	33.5	64	51.5
		Midscore	30	68	50
		Q ₃	50	72	60
		Q ₁	20	52	40
		Coefficient of Reliability ²	7.03	.77	.93
		For a true difference between average percentages of film and non-film groups			
B	Film	Average per cent.	76	66	68
		Midscore	80	64	70
		Q ₃	95	80	90
		Q ₁	60	52	50
	Non-Film	Average per cent.	59.7	59.8	63
		Midscore	60	54	60
		Q ₃	80	76	80
		Q ₁	40	48	40
		Coefficient of Reliability	3.3	1.6	.85

¹ As there is no necessity in these experiments of calculating percentile ranks it was considered sufficiently accurate to use the midscore values for the median and for the upper and lower quartiles. It can easily be seen that this procedure does not affect the conclusions in any way.

² The difference is not significant unless this figure reaches 3.3. The following table shows the chances of a true difference implied in the results reached.

D	Chances in 100.
A D	
D.	
.10	53
.20	56
.30	60

The value of illustrations in learning is clearly shown by the marked superiority of the experimental over the control group in the drawing tests in both Sets A and B. There is no significant difference between the groups in Tests B and D. The combined results appear to indicate that verbal tests are no indication of a child's clarity of realisation. He uses the words we give him, but whether they possess for him the connotation they have for the teacher is questionable.

47. Results with Older Groups. The results are different with the four sets C, D, F, G, whose ages range near 13.

Set.	Group.	Marks.	Drawings.	Short- Answer Test.	Essay.
C	Film	Average per cent.	81	86.2	56.7
		Midscore	90	86	60
		Q ₃	100	92	80
		Q ₁	70	84	35
		Average per cent.	79.5	86.6	66.5
	Non-Film	Midscore	80	88	67.5
		Q ₃	90	92	75
		Q ₁	70	80	55
		Coefficient of Reliability	.37	.23	1.7

D	
A D	Chances in 100.
D.	
.40	63
.50	66
.60	68
.70	71
.80	74
.90	76
1.0	79
1.1	81
1.2	83
1.3	85
1.4	87
1.5	88
1.6	90
1.7	91
1.8	93
1.9	94
2.0	95
2.1	95
2.2	96
2.3	97
2.4	97
2.5	98
2.6	98
2.7	98
2.8	99
2.9	99
3.1	99
3.2	99
3.3	100
and above.	

Set.	Group.	Marks.	Drawings.	Short- Answer Test.	Essay.
D	Film	Average per cent.	90.5	83.4	41.3
		Midscore	100	82	40
		Q ₃	100	92	46.6
		Q ₁	80	76	33.3
	Non-Film	Average per cent.	82.5	78.4	49.3
		Midscore	90	80	46.6
		Q ₃	100	92	53.3
		Q ₁	70	76	33.3
		Coefficient of Reliability	1.75	1.67	2.36
F	Film	Average per cent.	86	86.2	62.66
		Midscore	95	90	63.3
		Q ₃	100	96	80
		Q ₁	70	80	46.6
	Non-Film	Average per cent.	76.8	81	73.28
		Midscore	80	84	66.6
		Q ₃	90	88	93.3
		Q ₁	70	76	60
		Coefficient of Reliability	2.73	2.21	2.3
G	Film	Average per cent.	94	86	55.5
		Midscore	100	88	55.5
		Q ₃	100	96	66.6
		Q ₁	90	80	44.4
	Non-Film	Average per cent.	69	87.2	51.38
		Midscore	70	88	50
		Q ₃	90	96	66.6
		Q ₁	50	80	33.3
		Coefficient of Reliability	5.33	.54	1.02

Again the tests, considered together, may be said to show the value of illustrations in learning for children of about 13, since in the drawing test in all four sets there is some superiority of the experimental over the control group. The difference in Set C is negligible. It is greater in Sets D and F, and significant in Set F. The surprising point is that the differences should be no greater. It is arguable that the children had a sufficient stock of earlier knowledge to invalidate the whole experiment. That is not the case. All the children had a great many ideas on Early Man as hunter, but none of the groups, when asked during the lesson, could furnish clear information on two of the things they were asked to draw, the pit-dwelling type of habitation and the long barrow, nor did they know about the site of the Stone Age settlements on which

they were asked to write. These things were, however, sufficiently simple for children of this age to imagine with fair accuracy from oral description. In each set, the figures of the equated groups for the short-answer test are very close, and there is no significant difference between the essay marks.

48. The Delayed Tests for Sets A, B, C, D, F and G: Experiment 1.

Set.	Age. Yrs.Mnths.	Group.	Marks.	Grip.	Atmo- sphere.	Interval since Lesson.
A Girls	10.11	Film	Average per cent.	79.4	87 ¹	28 weeks
			Midscore	50	100	
			Q ₃	70	100	
			Q ₁	40	80	
			Average per cent.	71.5	88.5	
		Non-Film	Midscore	50	100	
			Q ₃	70	100	
			Q ₁	40	80	
			Coefficient of Reliability	1.9		
B Boys	11	Film	Average per cent.	52.5	92	15 weeks
			Midscore	50	100	
			Q ₃	70	100	
			Q ₁	40	80	
		Non-Film	Average per cent.	54.1	87	
			Midscore	50	100	
			Q ₃	70	100	
			Q ₁	40	80	
			Coefficient of Reliability	.502		
C Girls	13.2	Film	Average per cent.	62.63	90.52	14 weeks
			Midscore	60	100	
			Q ₃	80	100	
			Q ₁	50	80	
		Non-Film	Average per cent.	62	93	
			Midscore	60	100	
			Q ₃	80	100	
			Q ₁	40	100	
			Coefficient of Reliability	.13		

¹ In cases like this where the marks obtained are high for both groups, it is obvious that there is no difference in favour of either method, and that it would be futile to apply the formula for ascertaining the significance of the difference between the groups. Otherwise, the formula has been applied.

Set.	Age. Yrs.Mnths.	Group.	Marks.	Grip.	Atmo- sphere.	Interval since Lesson.
D Boys	13.3	Film	Average per cent.	64.21	91.57	13 weeks
			Midscore	60	100	
			Q ₃	80	100	
			Q ₁	40	80	
			Average per cent.	51.1	74.4	
		Non-Film	Midscore	60	100	
			Q ₃	80	100	
			Q ₁	40	40	
			Coefficient of Reliability	2.6	2.72	
F Girls	12.11	Film	Average per cent.	68	96	9 weeks
			Midscore	70	100	
			Q ₃	80	100	
			Q ₁	60	100	
		Non-Film	Average per cent.	59.4	95	
			Midscore	60	100	
			Q ₃	70	100	
			Q ₁	50	100	
			Coefficient of Reliability	2.4		
G Boys	12.8	Film	Average per cent.	80	90.58	29 weeks
			Midscore	80	100	
			Q ₃	100	100	
			Q ₁	60	80	
		Non-Film	Average per cent.	47	93	
			Midscore	40	100	
			Q ₃	60	100	
			Q ₁	20	100	
			Coefficient of Reliability	7.5		

In only one case, in the mark for Grip in Set G where the film group reaches a much higher average, does this delayed test show any significant differences between the control and experimental groups.

49. **Experiment 1 with Set H, Boys aged 14 years 10 months.** The subject was treated from a different angle with these older boys, the material provided by the film being used as the basis of a discussion on how a knowledge of the life of primitive man is gradually being built up by a pooling of the knowledge of archaeologist, geologist, and anatomist. It was an interesting experiment in the adaptation to use of a somewhat clumsy instrument. The film was too childish for these older boys, used in default of other material, but they were not uninterested in seeing it when prepared for seeking in it points verifiable by archaeological means.

With this experimental group a blackboard summary of the lesson was built up. In addition to the illustrative material used with the younger children, these boys were shown diagrams illustrating the alternation of the Ice Ages with warmer periods, and the extent to which the Ice cap spread over Europe; a diagram of the river terraces of the Thames was drawn on the blackboard.

50. The Test and Results for Set H : Experiment 1. This test was given :—

Name..... School Age.....

TEST FOR "PEOPLE OF THE AXE."

(Total Time—40 minutes.)

Test A. Time—10 minutes.

Marks are given for the amount of information shown.

Draw :—(1) A diagram of the terraces of the Lower Thames Valley.

(2) A rough sketch of a village of the New Stone Age, including as many indications of the type of site chosen as possible.

(3) A plan of a chambered Long Barrow.

(4) A Neolithic arrow showing hafting.

Test B. Time—5 minutes.

Answer the following questions shortly. One word will do when possible.

Questions.

Answers.

- (1) Which is the longer, the historic or the pre-historic period ?
- (2) How were the approximate dates of the pre-historic remains found in excavated caves decided ?
- (3) What was the most characteristic weapon of the Old Stone men ?
- (4) What evidence have we of the artistic ability of the Old Stone men ?
- (5) What shape were the barrows of the New Stone Age ?
- (6) What were the two chief ways in which the weapons of the New Stone men were better than those of the Old Stone men ?
- (7) What did they use for pick-axes ?
- (8) How did late Neolithic man haft his axes ?
- (9) What domestic animals did they possess ?
- (10) What is the characteristic mark of a Neolithic cooking pot ?
- (11) What system of exchange was used in Neolithic times ?

Test C. Time—25 minutes.

Give an account of the occupations of the men and women of the Neolithic Age, explaining in detail how the items of your information have been discovered or inferred.

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Results of Set H. Experiment 1. It was possible to mark the essays of the older boys differently from those of the younger groups. A quantitative mark was given as before, and in addition a mark for grip and atmosphere.

Set.	Age.	Group.	Marks.	Draw-ings.	Short-Answer Test.	ESSAY.		
	Yrs.Mnth.					Informa-tion.	Grip.	Atmo-sphere.
H Boys	14.10	Film	Average per cent.	84.06	66.6	54.2	69	88
			Midscore	84.4	66.6	54.4	70	100
			Q ₃	93.7	73.3	64.4	80	100
			Q ₁	75	60	35.5	53.3	80
			Average per cent.	58.75	59.3	49.2	57.6	65
		Non-Film	Midscore	56.2	60	44.4	60	60
			Q ₃	68.7	73.3	66.6	73.3	100
			Q ₁	50	46.6	31.1	40	40
			Coefficient of Reliability	7.4	2.17	.97	2.66	3.38

The boys have not been able to grasp the more difficult conceptions introduced into this lesson so well without illustrations. Again, it is the drawing test which brings out their value. There are no significant differences in the marks for the short-answer test, nor for information and grip in the essays, but there is a true difference in the mark for atmosphere. The boys who had seen the film wrote of the Stone Age with a greater sense of familiarity.

51. General Conclusions from Experiment 1. (a) These experiments corroborate the general view of the value of illustrations in learning History for pupils ranging in age from 10 years 11 months to 14 years 10 months. (b) The similarity of results between the pairs of equated groups in all save the drawing tests suggest the inadequacy of the verbal test to discover the clarity of the child's mental pictures. The girls in Set A in the control group who produce very poor drawings of the pit dwellings of the Stone Age cannot have such a clear idea of a settlement of the time as the children of the experimental group, yet their essays on the village are equally good.

52. Experiment 2, Part A. To compare the usual History lesson with a lesson making use of the film for portraying the general life of a period.

GROUP I. Oral+Blackboard+Still Pictures+Models.

GROUP II. Oral+Blackboard+Still Pictures+Models+Films.

(1) **Experiments with Sets A and B, Children aged 10+.** In these cases a method similar to that adopted for Experiment 1 was used, a lesson of 40 minutes being used to build up a general picture of the Bronze Age with the film "People of the Lake." With the control group the approximate date and length of the period was again fixed by a time line on the blackboard. The note was struck that this was a period of further progressive improvement just as they had found the Stone Age to be. The class was then told of the Bronze Age in the way of the film, as the dream of a Boy Scout, the children being encouraged to take as much part as possible in the lesson. The illustrations used were large black-and-white sketches of a warrior of the Bronze Age, of a lake village, of a woman of the period with distaff and spindle. The children also saw a sheet showing the development of the socketed axe, charts of the weapons, implements and pottery of the Bronze Age, and of Stonehenge. Spinning was illustrated to the class with a wooden spindle and raw wool, and weaving by a working model of a primitive loom. The experimental group had 20 minutes' introductory talk before seeing the film. They were told that they were going to see a film on the Bronze Age. First they must get the period clear. Then, from the film they must discover all the improvements developed by the people of the Bronze Age. A few must be considered first, because the film did not give sufficient detail, or time, to make them clear. Then was discussed the building of lake villages, the development of weapons, the chart of the axe heads again being shown, the introduction of agriculture, spinning, and weaving. A demonstration of spinning and weaving with the models of the primitive instruments was given this group, and they saw the picture of the woman with distaff and spindle. The development of religious ideas was mentioned to prepare the children for the superstitious fear shown by the villagers in the film, and a picture of Stonehenge shown. Seeing the film occupied the last 20 minutes of the lesson. It was shown without stops, but with an occasional comment, as when attention was drawn to the leaf shapes of the weapon-heads.

53. **The Test Set.** The following test was set :—

Name School
 Age Years Months.

TEST FOR FILM—"PEOPLE OF THE LAKE."
 (Total Time—40 minutes.)

Do not bother about writing and spelling in your answers.

Test A. Time—10 minutes.

Marks are given for the number of points shown, not for skill in drawing.

Draw :—(1) A man of the Bronze Age, with his shield, axe, and spear.

(2) A primitive loom.

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Name.....

Test B. Time—10 minutes.

Answer the following questions in the order given in as few words as possible. One word will do.

Questions.

Answers.

- (1) What did the men of the Bronze Age use to hold the foundation of a lake village in place ?
- (2) What did they *build* round the village for a defence ?
- (3) In what two ways could they reach the mainland ?
- (4) Of what did they make the walls of their huts ?
- (5) Were the walls of their huts higher or lower than those of the New Stone men ?
- (6) Where did they pasture their cattle and grow corn ?
- (7) What two implements did they use for spinning ?
- (8) How did they pass the shuttle across the loom ?
- (9) Who gave the alarm that an enemy was coming ?
- (10) What kind of designs did they place on their pottery ?
- (11) Of what did they make their bugles ?
- (12) About when did the Bronze Age begin ?
- (13) About when did it end ?

Put your name on your lined paper.

Test C. Time—5 minutes.

What other points interested you in the lesson ?

Test D. Time—15 minutes.

Turn over your paper. Write a short essay to answer the following question :
“ Why was life better in the Bronze Age than in the New Stone Age ? ”

The delayed test was of the usual type.

54. Results of Experiment 2, Part A: Sets A and B:—

IMMEDIATE RESULTS

Set.	Age.		Group.	Marks.	Drawing.		Short- Answer Test.	Essay.
	Yrs.	Mnth.			Warrior.	Loom.		
A Girls	10.11		Film	Average per cent.	36.3	49	60	43.5
				Midscore	40	50	60	40
				Q ₃	53.3	70	80	70
				Q ₁	26.6	30	46.6	30
				Average per cent.	53.5	49	80.6	59
			Non-Film	Midscore	53.3	50	86.6	60
				Q ₃	73.3	60	93.3	80
				Q ₁	40	40	73.3	40
				Coefficient of Reliability	3.4		4.8	2.5

IMMEDIATE RESULTS—*continued*

Set.	Age.		Group.	Marks.	Drawing.		Short- Answer Test.	Essay.
	Yrs.	Mnths.			Warrior.	Loom.		
B Boys	11	Film		Average per cent.	52	56	71.6	56
				Midscore	50	60	73.3	60
				Q ₃	66.6	70	80	70
				Q ₁	46.6	40	66.6	40
		Non-Film		Average per cent.	73	56	71.6	49.5
				Midscore	76.6	60	73.3	50
				Q ₃	80	70	80	70
				Q ₁	66.6	50	60	30
				Coefficient of Reliability	7.3			1.29

DELAYED RESULTS

Set.	Age.		Group.	Marks.	Grip.	Atmo- sphere.	Interval since Lesson.
	Yrs.	Mnths.					
A Girls	10.11	Film		Average per cent.	54.1	78.8	27 weeks
				Midscore	60	100	
				Q ₃	60	100	
				Q ₁	40	40	
		Non-Film		Average per cent.	49.4	64.1	
				Midscore	50	60	
				Q ₃	60	80	
				Q ₁	40	40	
B Boys	11	Film		Average per cent.	46	92	14 weeks
				Midscore	50	100	
				Q ₃	60	100	
				Q ₁	30	100	
		Non-Film		Average per cent.	40.5	86	
				Midscore	40	100	
				Q ₃	50	100	
				Q ₁	30	25	
				Coefficient of Reliability	.38	2.63	

In the case of Set B, the scores of the two groups are remarkably close. The only significant difference is the mark for the drawing of the warrior, and the control group achieved here a much better result than the experimental group. A still picture is better than the film for the observation of details of dress and equipment for boys of this age, if the film is not

stopped nor comment made. With the girls in Set A, the control group not only do the first drawing better than the film group, but give many more correct replies in the short-answer test. In neither set does re-seeing the loom on the film make the details clearer than one view of the model. The mark of both groups in each set is exactly the same under this head. In the delayed tests there is no true difference between the scores of the groups under either head.

55. Experiment 2, Part A. Experiments with Sets C, D, F, G: Children aged about 13. Five experiments were performed with children aged about 13, the first four with the same film, "People of the Lake." In Sets C and D, the experiment was again conducted exactly as with the younger children in Sets A and B. Sets F and G had lessons of 45 minutes. The experimental group in Set G again had 5 minutes' talk at the end of the film to clear up difficulties. The girls in Set F had 15 minutes' introductory talk, 20 minutes for the film which was shown with many interjected, oral comments, 10 minutes' discussion at the end of the film. The illustrative material was used in all cases as was described for Set A, and the same tests were given.

56. Results of Experiment 2, Part A: Sets C, D, F, G.

IMMEDIATE RESULTS

Set.	Age. Yrs. Mths.	Group.	Marks.	Drawing.		Short- Answer Test.	Essay.
				Warrior.	Loom.		
C Girls	13.2	Film	Average per cent.	57.3	76	66.4	49
			Midscore	60	80	66.6	50
			Q ₃	66.6	80	86.6	66.6
			Q ₁	46.6	70	53.3	33.3
		Non-Film	Average per cent.	71.3	61	77	63.6
			Midscore	73.3	70	80	60
			Q ₃	80	80	86.6	86.6
			Q ₁	60	50	66.6	53.3
			Coefficient of Reliability }	4.03	3	2.7	3.14
D Boys	13.3	Film	Average per cent.	51.6	69	66.6	44.5
			Midscore	53.3	70	73.3	50
			Q ₃	60	80	73.3	60
			Q ₁	46.6	60	60	30
		Non-Film	Average per cent.	56	68	71	50.5
			Midscore	63.3	70	66.6	50
			Q ₃	66.6	80	80	60
			Q ₁	40	60	60	30
			Coefficient of Reliability }	.84	.27	1.34	1.02

IMMEDIATE RESULTS—*continued*

Set.	Age. Yrs.Mnths.	Group.	Marks.	Drawing.		Short- Answer Test.	Essay.
				Warrior.	Loom.		
F Girls	12.11	Film	Average per cent.	51.57	63.36	81.05	54.4
			Midscore	53.3	60	80	55
			Q ₃	66.6	80	93.3	80
			Q ₁	40	60	73.3	35
		Non-Film	Average per cent.	62.66	65	75.66	42
			Midscore	66.6	70	86.6	37.5
			Q ₃	73.3	80	93.3	55
			Q ₁	53.3	50	73.3	30
			Coefficient of Reliability	3.64	.56	1.3	3.2
G Boys	12.8	Film	Average per cent.	69.33	68	87.33	45.6
			Midscore	70	70	93.3	44
			Q ₃	73.3	80	93.3	56
			Q ₁	66.6	50	80	28
		Non-Film	Average per cent.	62.33	70.5	89	48.8
			Midscore	60	75	86.6	46
			Q ₃	73.3	80	93.3	68
			Q ₁	53.3	60	86.6	28
			Coefficient of Reliability	2.67	.74	.704	.67

DELAYED RESULTS

Set.	Age. Yrs.Mnths.	Group.	Marks.	Grip.	Atmo- sphere.	Interval since Lesson.
C Girls	13.2	Film	Average per cent.	68.3	83.3	13 weeks
			Midscore	60	100	
			Q ₃	70	100	
			Q ₁	40	60	
		Non-Film	Average per cent.	51.05	61.05	
			Midscore	50	60	
			Q ₃	60	80	
			Q ₁	40	40	
			Coefficient of Reliability	2.7	2.9	

DELAYED RESULTS—*continued*

Set.	Age. Yrs.Mnths.	Group.	Marks.	Grip.	Atmo- sphere.	Interval since Lesson.
D Boys	13.3	Film	Average per cent.	64.44	85.5	12 weeks
			Midscore	60	100	
			Q ₃	80	100	
			Q ₁	40	60	
		Non-Film	Average per cent.	64.5	85	
			Midscore	60	100	
			Q ₃	80	100	
			Q ₁	50	80	
			Coefficient of Reliability	.012		
F Girls	12.11	Film	Average per cent.	65.5	100	9 weeks
			Midscore	70	100	
			Q ₃	70	100	
			Q ₁	50	100	
		Non-Film	Average per cent.	47	86	
			Midscore	40	100	
			Q ₃	60	100	
			Q ₁	30	60	
			Coefficient of Reliability	4.2	2.5	
G Boys	12.8	Film	Average per cent.	42.6	88.5	28 weeks
			Midscore	40	100	
			Q ₃	50	100	
			Q ₁	32.5	70	
		Non-Film	Average per cent.	36.6	61.5	
			Midscore	33.7	55	
			Q ₃	42.5	80	
			Q ₁	25	50	
			Coefficient of Reliability	1.7	5.4	

The immediate results are inconclusive ; so far as they are concerned the two methods seem of equal value. The scores of the boys in Sets D and G are extraordinarily close. In Set C the non-film group do the better ; the film group in this case has learned more about the loom, but on all the other points the control group scores more highly. On the other hand, in Set F, though the non-film girls know more about the dress and equipment of a warrior of the Bronze Age, the film group give more general information on the period in their essays. The film has not helped in learning, but it aids retention. In the delayed tests the two groups of Set D write essays of much the same type. In the other three

sets the film groups achieve appreciably better results. They are discussed after the account of the fifth test of this kind with pupils aged roughly 13.

57. Experiment 2, Part A : Additional Test with Set D. The Experimental Group. Reel II. of the Roman Britain film, on life in a Romano-British town, was used for the same purpose with the boys of Set D. Before the experimental group saw the film, it was noted in a 10 minutes' talk that the period of Roman occupation was long—the occupation of the South civil, of the North military—that the type of civilisation evolved in the period was largely Roman but partly British, and that the Britons shared in this civilisation. In the third century of the occupation, a wealthy Briton lived in very much the same manner as the Roman settlers. The film was then shown in silence ; this took 12 minutes. Afterwards, the boys were asked if they wished to ask questions. There was little response. One asked what the Governor's attendant carried, a reference to the lictor and the fasces. Another asked why a building was called the Baths, when the men were only massaged there—a conscious criticism of the film. But more questions arose in the course of the discussion, during which the essential aspects of life in a Romano-British town of the south-east were brought out by dealing with points in the film. The boys had noticed most of the points in the film, and had been making mental comparisons between conditions then and now. For instance, one boy remarked, without any question or prompting, that the interior of the basilica was like a church. The boys co-operatively drew on the blackboard plans of a Romano-British town, of the forum and surrounding buildings, and of the basilica. This discussion lasted 18 minutes.

58. Experiment 2, Part A : Additional Test with Set D. The Control Group. The control group had the same introductory matter. The points given in the film were then dealt with orally, black-and-white sketches of a Roman woman and of a man wearing tunic and toga being shown. The same plans as before were gradually built up on the blackboard as the lesson proceeded. The last part of the lesson was spent in reading to the boys a short story of a day in the life of a boy in a Romano-British town. The matter was mostly taken direct from Chapter I. of *Boys and Girls of History*, but with some additions to incorporate points shown on the film and not dealt with in Miss Power's story, and with many cuts, so that the subject matter taken with the two groups was identical.

59. Tests and Results. The immediate test took the form of a free essay : "Describe the life of a Romano-British town." The figures for immediate and delayed tests are :—

IMMEDIATE RESULTS

Set.	Age. Yrs. Mnths.	Group.	Marks.	Grip.	Atmo- sphere.
D	13.3	Film	Average per cent.	70	86
			Midscore	58	100
			Q ₃	76	100
			Q ₁	36	100
		Non-Film	Average per cent.	79	89
			Midscore	40	100
			Q ₃	60	100
			Q ₁	40	100
			Coefficient of Reliability	1.4	

DELAYED RESULTS

Set.	Age. Yrs.Mnths.	Group.	Marks.	Grip.	Atmo- sphere.	Interval since Lesson.	
D	13.3	Film	Average per cent.	59.4	94	5 weeks	
			Midscore	50	100		
			Q ₃	80	100		
			Q ₁	50	100		
			Non-Film	Average per cent.	49.4		96.47
		Midscore	40	100			
		Q ₃	60	100			
		Q ₁	40	100			
		Coefficient of Reliability			1.8		

60. Discussion of Results of Experiment 2, Part A : with Sets C, D, F, G, aged about 13. It has been noted in paragraph 56 that these experiments do not show the film to have any greater value than other methods for a first learning. The delayed tests, however, seem to give an indication that a short film is likely to help children of the given age in the retention both of an impression of actuality and grip of fact, since the differences in the scores of all the groups tend in the same direction ; the experimental group is superior in all but one score ; and some of the differences are significant. Under the heading of atmosphere, the scores in one experiment with Set D are identical and in the second practically so, though the control group here has the advantage. In Set G, the superiority of the film group is marked ; in Set C, the coefficient of reliability for the difference which gives the advantage to the film is 2.9, and

in Set F 2·5. In the case of the mark for grip, there is no difference in the scores of the compared groups in the first experiment with Set D. The highly significant difference in the scores of Set F is reinforced by the smaller differences in the other cases. Set F had a discussion after the film.

61. Effect of the Type of Film on Delayed Results. Moreover, it is possible that had the film "People of the Lake" been more directly fitted for the purpose of History teaching, the score of the experimental groups for grip would have been higher. The one set of scholars remembered the story of the film far more vividly than the other remembered the lesson. The children in the control groups had no clear picture of the Bronze Age as a whole. Their essays give the effect of recall of scattered pieces of information. There is a greater unity in the essays of the film groups. But it is the modern Boy Scout, the central figure of the film, who inevitably stands out in their memory. They tell the story of his actions, but in so doing often omit to mention the background in which those actions took place. For instance, a boy tells how the Scout paddled across to the lake village; he does not delay the story of Brown's exciting doings to explain that he went in a dug-out canoe, or to describe what kind of a paddle was used. Incidents non-essential to a picture of the Bronze Age are remembered because of their humour and their dramatic prominence in the film—Scout Brown drinking his ginger-beer, the Chief strutting about in the Scout's hat, the Scout lassoing the boy who had taken his book. In comparison with such episodes, the Scout's tour of the village and inspection of the occupations of its people naturally pale into insignificance in a boy's mind. Even so, the children in the film groups remember more details of the life of the time than the others. That they do not give more indicates less that films as a whole are likely to be but little aid to memory of historical details—the child tells selectively the whole story of the film—than that the emphasis of this particular film is faulty for teaching purposes.

62. Questions on Time in Experiments 1 and 2. In the immediate tests in Experiments 1 and 2 four "time" questions were set, for the criticism had been received that the presentation in a film lasting 10 or 20 minutes of an epoch of many thousands of years, would tend to prevent the child from realising the extent of the period. It does not seem likely that the film can help to any great extent in teaching time relationships,¹ since these in general can only be indicated by sub-titles, but there seems no reason why the film should destroy the efficacy of other teaching on time matters. The slight excursion into the problem in these two experiments shows that here the film had no harmful effects.

¹ After detailed enquiry into the connection of the film with the teaching of time relationships in the Yale experiment, it is reported: "The photoplays interfered with the teaching of time relationships. They decreased by 10 per cent. the learning of such relationships." *Motion Pictures in History Teaching*, Knowlton and Tilton, p. 90.

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In the twenty-four comparative sets of answers, the film group was superior to the control group in ten cases, the non-film group superior in ten cases, the groups equal in four. The questions were :—

- (1) About how many years ago did the New Stone men come to Britain ?
- (2) About how long did the New Stone Age last ?
- (3) About when did the Bronze Age begin ?
- (4) About when did it end ?

The word "about" in the questions is not a loophole for vagueness of reply, but continues the class-teaching on the indefiniteness of our knowledge on this period. Only the first question is dealt with in the films. The point is not whether the films have taught these facts, but whether films have interfered with realisation of time values taught in other ways. The table of results follows :—

TIME QUESTIONS

Percentage of Correct Replies

Set.	Age.		Questions.	Film.	Non-Film.
	Yrs.	Mnths.			
A	10.11		1	53	25
			2	68	65
			3	80	80
			4	60	70
B	11		1	70	90
			2	45	45
			3	70	75
			4	30	55
C	13.2		1	65	60
			2	80	70
			3	80	80
			4	55	75
D	13.3		1	60	65
			2	10	25
			3	80	80
			4	75	80
F	12.11		1	100	84
			2	80	74
			3	95	90
			4	58	80
G	12.8		1	80	55
			2	85	95
			3	90	100
			4	80	90

63. Experiment 2, Part A : 1st Experiment with Set E, Boys aged 12 years 3 months. This experiment was tried with Set E with both Reel I. and Reel III. of the Roman Britain film. Reel I. deals with the life of the Britons on the eve of the Roman occupation. The experimental group was shown the film silently. This took 15 minutes. The last 25 minutes were given to a discussion lesson on the period, the film material being woven in with the necessary matter. A blackboard sketch was made of the exterior of a British corridor house, since this is not clearly shown in the reel, and of the types of design used by the Britons for ornamentation. The boys enjoyed talking about the film, and their observation of even the smallest points was striking. The control group had an oral lesson covering the same ground. A blackboard summary was made of the points of the lesson. The class saw large pictures of a man and woman of the period, and charts showing the weapons, tools, and pottery of the time. A demonstration of the method of making coiled pottery was given with plasticene, and of the making of baskets with willow. The same blackboard sketches were reproduced.

64. The Immediate Test. The immediate test was as follows :—

Name School.....
Age..... Years..... Months. Group.....

TEST ON "ROMAN BRITAIN." Part I.
(Total Time—40 minutes.)

Do not bother about writing and spelling in your answers.

Test A. Time—10 minutes.

Answer the following questions as shortly as possible. One word will do.

Questions.

Answers.

- (1) Were there windows in the British huts ?
- (2) With what were the huts thatched ?
- (3) What shape was the Chieftain's house ?
- (4) What was the only kind of furniture in most huts ?
- (5) Did men or women cut the corn ?
- (6) What implements were used for this ?
- (7) Of what metal was the Chief's drinking cup made ?
- (8) What garment did his wife wear over her dress ?
- (9) On what instrument did the minstrel play to the Chief ?
- (10) With what did the Druid wreath his hair ?
- (11) Of what was his altar made ?
- (12) Why did the Celtic women hang flowers on the trees ?
- (13) To what music did the Britons dance round their altars ?
- (14) What fierce animal did the Britons often hunt in the forest ?
- (15) How did Celtic women show great grief ?

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Put your name on your lined paper.

Test B. Time—10 minutes.

What other things did you notice during the lesson? Give these in short sentences in any order you like.

Test C. Time—20 minutes.

Write a short essay telling all the things you can think of that show the Britons were not savages when the Romans came in A.D. 43.

65. **Results of Immediate and Delayed Tests.** The results of the two tests are :—

IMMEDIATE TEST					DELAYED TEST			
Set.	Age.	Group.	Marks.	Short-Answer Test.	Essay.	Grip.	Atmosphere.	Interval Since Lesson.
E	12.3	Film	Average per cent.	85	43.5	59.4	95	9 weeks
			Midscore	86.6	40	60	100	
			Q ₃	93.3	50	80	100	
			Q ₁	80	30	40	100	
		Non-Film	Average per cent.	66.3	43.68	48.1	91.2	
			Midscore	66.6	50	45	100	
			Q ₃	73.3	80	60	100	
			Q ₁	60	10	40	100	
			Coefficient of Reliability	8.92	.013	2.2		

Discussion of these results is postponed until after the account of the second experiment with this group.

66. **Experiment 2, Part A: 2nd Experiment with Set E.** This second experiment with Set E was taken with Reel III. of the Roman Britain film. The experimental group was shown the reel with a running oral commentary and frequent stoppages of the film for examination of the detail. The whole lesson took 40 minutes. The control group had an oral lesson of the same length. With the class this synopsis of the oral lesson was made on the blackboard at the end of the period.

The Roman Army.

A regular, professional army.

Uniform equipment.

Training in tactics.

Disciplined.

The Britons' Army.

A tribal force, taking to arms when necessary.

Haphazard arms.

No training. Trust in a wild rush.

Unruly.

The equipment of the two armies was learned from study of large, black-and-white drawings of a Roman soldier and of a British warrior chief. A blackboard sketch was made of a Roman officer's helmet. When discussing tactics, a drawing of a British war chariot was shown, and blackboard sketches made to illustrate the shield wall and the wedge formation of the Romans. A Roman standard was also sketched.

67. The Immediate Test. The immediate test was :—

Name School Age

TEST ON "ROMAN BRITAIN." Part III.

(Total Time—40 minutes.)

Do not bother about writing and spelling in your answers.

Test A. Time—10 minutes.

Marks are given for the number of points shown, not for skill in drawing.

Draw :—(1) Diagrams of a Roman shield, sword, spear, and helmet.

(2) Diagrams of a British shield, sword, and helmet.

Name

Test B. Time—5 minutes.

Answer the following questions in the order given in as few words as possible. One word will do.

Questions.

Answers.

- (1) How was the leather cuirass of a Roman soldier strengthened ?
- (2) To what did he fasten his baggage ?
- (3) What did the Romans carry instead of a flag ?
- (4) What two defences were built each night to protect the Romans' camps ?
- (5) What was the British signal for war ?
- (6) From what did British women watch a battle ?
- (7) What part of a British army began a fight ?
- (8) How did the Romans use their shields to resist a fierce attack ?
- (9) How did the Roman soldiers form up to force themselves through a break in the enemy's ranks ?

Put your name on your paper.

Test C. Time—10 minutes.

Did you notice any other points in the film ? Give these briefly, in any order.

Test D. Time—15 minutes.

Turn over your paper. Write a short essay to answer this question : "Why did the Roman army overcome the Britons ?" Give all the reasons you can.

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68. **The Result of Immediate and Delayed Tests.** The figures for the two tests are :—

IMMEDIATE TEST						DELAYED TEST			
Set.	Age.	Group.	Marks.	Drawing.	Short-Answer Test.	Essay.	Grip.	Atmosphere.	Interval since Lesson.
E	12.3	Film	Average per cent.)	70.2	73	69	58.4	92.6	7 weeks
			Midscore	68	80	60	60	100	
			Q ₃	76	80	70	70	100	
			Q ₁	68	60	50	40	100	
			Average per cent.)	80.63	69.47	67.36	47	89	
		Non-Film	Midscore	84	70	60	50	100	
			Q ₃	92	80	70	60	100	
			Q ₁	64	50	50	40	60	
			Coefficient of Reliability)	3.48	1.13	.49	3	.78	

69. **Discussion of Results of Experiments with Set E.** The film group gains a far higher score than the non-film group in the first experiment in the short-answer test. In the second experiment the non-film group do better drawings. As in several cases where the Bronze Age film was used, here, with another film, the still, black-and-white picture has proved a better medium for observation of detail of dress and equipment than the film. Otherwise, there is no true difference between any of the scores in the immediate tests. In the delayed tests, the experiments point to the fact that the film helps boys of this age to retain a better grip of the subjects studied, since in the first case a slight superiority is registered for the film group under this head, and a true difference to its advantage in the second. Little difference could be discerned in the atmosphere of the essays. In the film on the armies, the non-film group gave vivid descriptions and sketches of the separate features of the battle, shield wall, wedge, and tortoise. They seemed to remember these more clearly than the film group, probably because the last two of these manœuvres were shown very confusedly on the film. On the other hand, the film group had a more unified idea of the battle as a whole.

70. **Experiment 2, Part A: with Set H, Boys of 14 years 10 months.** For the purposes of the same test, Set H saw the "People of the Lake," taking 20 minutes, and Reel I. of the Roman Britain film, taking 12 minutes to form a review of the Bronze and Early Iron Ages. This allowed 13 minutes' introductory lesson when the date and length of the period was fixed, and the boys prepared to look for gradual improvements in civilisation in the film. The boys saw the models of spindle and loom, and charts of the development of the socketed

axe. The films were shown with occasional comment. The control group had the same illustrative apparatus as the younger groups, with additional pictures of a man and woman of the Iron Age, and charts of the tools, weapons, and pottery of that period. They were tested by an essay: "Give an account of Life in the Bronze Age and in the Early Iron Age, indicating the progressive improvements made." The marks were:—

Set.	Age. Yrs. Mnths.	Group.	Marks.	Information.	Grip.	Atmosphere.
H	14.10	Film	Average per cent.	63.8	61	87
			Midscore	60	60	80
			Q ₃	78	70	100
			Q ₁	47	50	80
		Non-Film	Average per cent.	62.1	60	83
			Midscore	58	60	80
			Q ₃	87	70	100
			Q ₁	41.8	50	80
			Coefficient of Reliability	.36	.32	

Marks were lost for grip in both groups because the boys spent so long on describing the Bronze Age that they had not time to complete the latter part of the essay. Several boys write "Unfinished" at the end of their papers. One writes, "Foiled by time." The essays from both groups were interesting and detailed and equally good.

71. **Experiment 2, Part B.** Another series of experiments were undertaken to compare an oral "Story" lesson, the narrative type of lesson with an incident film. Sets A to H saw the Wolfe film. In Set D, a comparative test was not possible, since all had very recently learned the story in their term work. In Set C, too many girls were absent from one group in the delayed test to make a fair comparison possible. All the pairs of groups were treated in the same way. 50 minutes were allowed for the lessons. Each experimental group first had a brief, oral explanation of the long rivalry of England and France over trade and colonies. Then the film was shown, with stops at all the maps for explanation. No other comments were made, save an occasional remark, *e.g.* "There are the French in white coats," to help the children to differentiate the rival armies. The story of the taking of Quebec, as it is depicted in the film, was told orally to the control group. The names and positions of the chief persons taking part in the incident were written on the blackboard at their first mention, and all the maps shown in the film were also sketched on the blackboard at the appropriate time in the account.

IMMEDIATE TEST

DELAYED TEST

Set.	Age.	Group.	Marks.	ESSAY.				Grip.	Atmo- sphere.	Interval since Lesson.
				Inform- ation.	Grip.	Atmo- sphere.	Short Question. Reasons.			
E Boys	12.3	Film	Average per cent.	62.7	45.2	93.5	25	59.1	95	5 weeks
			Midscore	59.3	42	100	20	60	100	
			Q ₃	75	64	100	40	80	100	
			Q ₁	47.9	32	90	0	40	100	
		Non-Film	Average per cent.	65.3	37.4	84.5	22	50.4	88	
			Midscore	61.4	36	100	20	48	100	
			Q ₃	79.1	48	100	40	64	100	
			Q ₁	50	28	70	0	36	80	
			Coefficient of Reliability	.53	1.85	1.9	.479	1.7	3.31	
F Girls	12.11	Film	Average per cent.	51.16	51.8	87.5	27	35	91	9 weeks
			Midscore	48.8	50	100	20	32	100	
			Q ₃	65.9	76	100	40	40	100	
			Q ₁	35.3	32	70	20	28	80	
		Non-Film	Average per cent.	58	43.8	83.5	39	36.4	80	
			Midscore	55.3	40	85	40	38	80	
			Q ₃	68.2	60	100	60	48	100	
			Q ₁	42.3	32	70	20	28	60	
			Coefficient of Reliability	1.49	1.55	.87	2.1	.42	2.17	
G Boys	12.8	Film	Average per cent.	60.53	45.17	95.29	30.58	36.5	82.5	22 weeks
			Midscore	61.8	36	100	40	32	100	
			Q ₃	69	64	100	40	44	100	
			Q ₁	47.2	32	100	20	28	60	
		Non-Film	Average per cent.	63.44	41.47	94.77	55.78	31.29	76.47	
			Midscore	63.6	40	100	60	28	80	
			Q ₃	80	52	100	80	36	100	
			Q ₁	47.2	32	100	40	24	60	
			Coefficient of Reliability	1.16	1.04		2	.92	.909	
H Boys	14.10	Film	Average per cent.		60.8	98	62			
			Midscore		64	100	60			
			Q ₃		68	100	80			
			Q ₁		56	100	40			
		Non-Film	Average per cent.		47.2	82	51			
			Midscore		44	90	40			
			Q ₃		56	100	80			
			Q ₁		40	60	40			
			Coefficient of Reliability		4.33	3.9	2			

73. Discussion of Results. These figures show that the story of Wolfe, as given in the film, is learned and retained equally well, or rather equally badly, by film and oral groups, with the exception of the older boys. It is too long and complicated for scholars up to the age of 13+ to grasp fully in one period. The children could not be expected to give detail in the time at their disposal. It was possible for them to give an outline account of the campaign. Most of them, however, concentrated on a few striking episodes, told the story of the climb, mentioned the battle, described the death of Wolfe, while ignoring such things as the causes of the struggle and events in the winter of 1759-60. At the same time, the accounts are graphic, with much picturesque detail. All this is true equally of control and experimental groups. Though the former give somewhat more attention to causes, more of the latter remember the urgency of relief in 1760. These criticisms apply both to immediate and delayed tests. Hence the low mark for all groups save those of Set H for grip as contrasted with the high mark for atmosphere. An interesting difference appears between film and non-film essays, mainly noticeable in the essays from the older girls of Sets C and F. It was often difficult to know how to apportion the quantitative mark for information, the purely objective mark, because these girls first described movements as planned in the minds of the leaders, and later gave an account of these events in terms of action. The movement of these non-film essays was less quick than those of the film groups. With girls of this age, this was counter-balanced by a clearer realisation of the sequence of events in the non-film groups. These differences suggest both a shortcoming and specific advantage of the film. It admirably portrays action, not so easily things of the mind. The older boys were old enough to grasp the story fully in the time. The experimental group said little of the causes of the struggle, but much of all the rest. They gave a proportionate share to each part of the story, wrote with certainty and ease. The control group were far more confused over events. A half-memory of the details of the story in the immediate test leads to such things as descriptions of all the army scrambling up the cliffs, or worse, of all the army being hauled up the cliffs by ropes let down by the Forlorn Hope. In one case, Montcalm is said to be in charge of the Samos battery, in another the English are given Canadian help, in a third, Quebec is said to be taken and held without difficulty, once the cliffs were scaled. The intricacies of the campaign were clearer to boys of this age on the film than from an oral account.

74. General Conclusions from Experiment 2. Usual lesson + Film *versus* Usual lesson.

- (1) **With Children of 10 + to 11.** When the film "People of the Lake" was used, the immediate tests showed that both in Sets A and B the control groups had learned rather more facts during the usual type of lesson than had the children in the film groups. No other differences emerged in the first tests. In the delayed tests, no appreciable differences could be traced

between the two groups. With the Wolfe film, there are no significant differences in either division in immediate or delayed tests. These results point to the fact that the usual type of lesson is of more value for children of this age than the film, when no discussion lesson follows the film.

75. (2) **With Boys aged 12 years 2 months.** In the first experiment the film group had a true superiority in the immediate test in the short-answer test. The film had been a help in the acquisition of fact. In the second experiment, the higher score of the film group for the drawings has been taken to indicate the greater value of still pictures for study of the detail of dress and equipment. On the other hand, the delayed test on the same film showed that the film is a help in building up a unified picture of a changing composite whole such as the battle between Romans and Britons. It also appears from the delayed tests on the two experiments in Part A that the film aided these boys to remember facts, since under the heading of grip there is a true difference between the marks of control and experimental groups in one case, and a fairly significant difference in the other. The results of both immediate and delayed tests are neutral in the case of the Wolfe film. That is to say, the film achieves equally as good results as the usual type of lesson in every case, and there is a suggestion that for children of this age, a short film is a definite help.
76. (3) **With Children aged 12 years 8 months to 13 years 3 months.** The results have been discussed at some length in paragraphs 56, 60, 61, 73. They give some indication that a short film creates a more permanent impression both of essential facts and of actuality than the ordinary lesson. A long, incident film of the Wolfe type, taken apart from other accompanying lessons, is of no more demonstrable value than a story told by the teacher.
77. (4) **With Boys aged 14 years 10 months.** In the experiment with the two reels showing social background, the results of the film and lesson groups were equally good, but in the second experiment with the Wolfe film, the film was grasped better than the story, and the atmosphere of the times much better caught. This seems to suggest that suitable films are likely to be of value to boys of this age.

CHAPTER IV

THE FORMAL EXPERIMENTS ON THE TECHNIQUE OF USING THE FILM

78. Experiment 3 of the Formal Series. Two sets of formal experiments were undertaken in an attempt to discover the best method of using the film. School E did not take part in these experiments. A third group was introduced in the remaining schools except in Set B, where two groups only were used. Groups I. and II. in every school had each seen one film. In the first experiment Group II. was the experimental group and saw the film on the Stone Age; in the second test Group I. was the experimental group and saw the film "People of the Lake." This change had the double purpose of preventing any possible feeling of aggrievedness and consequent lack of effort in doing the tests on the part of one group, and of keeping the two groups level for the purpose of the third test. Group III. was at some disadvantage in comparison with Groups I. and II., since it was their first time of taking a film test. For Experiment 3, Reel I. of the Roman Britain film, showing a British village in A.D. 43, was used. This took 14 minutes to show when taken slowly. Lessons of 45 minutes were given. With each set, one group saw the reel at the beginning of the period, and then had an oral discussion lesson of 31 minutes on the Early Iron Age. Another saw the film, had 17 minutes for clearing up difficulties and for the indication of a few points not shown on the reel, and again saw the film at the end of the lesson. The third had an introductory talk of 31 minutes and then saw the film. The test earlier used with Set E, and described in paragraph 63, was used. The drawing tests given in Experiments 1 and 2 were discarded, since all groups saw the reel, to allow longer time for the essay.

79. Results of Experiment 3: Girls aged 10 years 9 months. In the tables of figures the following abbreviations are used :—

F + L	= Film and Lesson.
F + L + F	= Film and Lesson and Film.
L + F	= Lesson and Film.
M	= Midscore.
Q ₃	= Upper Quartile.
Q ₁	= Lower Quartile.

EXPERIMENT 3: IMMEDIATE TEST—GIRLS AGED 10 YEARS 9 MONTHS

Set.	Age.	Group.	Average per cent. Answer Test.	Coefficient of Reliability between Groups. Short-Answer Test.	M.	Q ₁	Average per cent. Essay.	Coefficient of Reliability between Groups. Essay Test.	M.	Q ₃	Q ₁
A	10.11	F+L	81	2.5	86.6	93.3	44.3	.75	53.3	60	13.3
Girls		F+L+F	72.3	.54*	73.3	80	42.3	.68	43.3	60	26.6
		L+F	83	3.33	86.6	93.3	40.6	.1	40	53.3	26.6

* .54 gives the Coefficient of Reliability for a true difference between 81 and 83, the results of the first and last groups quoted in the preceding column. A similar relationship is indicated by the figure following the large brackets throughout this present chapter when three groups are concerned.

EXPERIMENT 3: DELAYED TEST—GIRLS AGED 10 YEARS 9 MONTHS

Set.	Age.	Group.	Average per cent. Grip.	Coefficient of Reliability between Groups. Grip.	M.	Q ₁	Average per cent. Atmosphere.	Coefficient of Reliability between Groups. Atmosphere.	M.	Q ₃	Q ₁	Interval since Lesson. Weeks.
A	10.11	F+L	68.2	.8	60	80	96.4		100	100	100	25
Girls		F+L+F	73.1	.1	80	100	96.8	.1	100	100	100	
		L+F	62.3	.19	60	80	90.5		100	100	100	

The only significant difference between any of the groups on any score is that between Group II., Film + Lesson + Film, and Group III., Lesson + Film, for the short-answer test. This suggests that girls of this age acquire detail better if they have longer time for oral discussion than if they see the film twice.

80. Experiment 3: Results with Set B, Boys aged 11.

IMMEDIATE TEST

Set.	Age.	Group.	Average per cent. Short-Answer Test.	Coefficient of Re-liability between Groups. Short-Answer Test.	M.	Q ₃ .	Q ₁ .	Average per cent. Essay.	Coefficient of Re-liability between Groups. Essay Test.	M.	Q ₃ .	Q ₁ .
B Boys	11	F+L	78	} 5.1	76.6	86.6	73.3	44.6	} .92	40	60	33.3
		L+F	64		63.3	73.3	60	39.6		43.3	60	20

EXPERIMENT 3: SET B, DELAYED TEST

Set.	Age.	Group.	Average per cent. Grip.	Coefficient of Re-liability between Groups. Grip.	M.	Q ₃ .	Q ₁ .	Average per cent. Atmosphere.	Coefficient of Re-liability between Groups. Atmosphere.	M.	Q ₃ .	Q ₁ .	Interval since Lesson. Weeks.
B Boys	11	F+L	40	} .24	40	50	30	84	} 1.22	100	100	60	11
		L+F	41		35	50	30	76		100	100	60	

Only two groups were used. The only significant difference is again in the short-answer test. The group that had the lesson after the film score the more highly. Group I. had sufficient background of general knowledge to follow this reel, which is simple, without definite preparation. Further, the impatience of these small boys for the film during the lesson, when they were expecting to see it before the talk like Group I., may help to account for this result.

81. Experiment 3: Results with Sets C, D, F, G, pupils aged about 13.

IMMEDIATE TESTS

Set.	Age.	Group.	Average per cent. Short-Answer Test.	Coefficient of Re-liability between Groups. Short-Answer Test.	M.	Q ₁ .	Q ₃ .	Q ₁ .	Average per cent. Essay.	Coefficient of Re-liability between Groups. Essay Test.	M.	Q ₃ .	Q ₁ .
C Girls	13.2	F+L	89.3		93.3	93.3	86.6	43.16			43.3	56.6	26.6
		F+L+F	90.3		93.3	93.3	86.6	39.1		.88	40	50	23.3
		L+F	91.6		93.3	100	80	36.3		.7	36.6	46.6	26.6
D Boys	13.3	F+L	76.6		80	80	66.6	45			40	66.6	26.6
		F+L+F	84.6		86.6	93.3	80	38		1.64	36.6	46.6	20
		L+F	78.6		80	93.3	66.6	45.3		1.39	40	60	26.6
F Girls	12.11	F+L	92.33		93.3	100	86.6	62.75			63.7	72.5	50
		F+L+F	88		93.3	100	73.3	47.87		4.1	48.7	57.5	40
		L+F	89.8		93.3	93.3	86.6	55		1.9	57.5	65	42.5
G Boys	12.8	F+L	97		100	100	93.3	41.37			33.7	52.5	27.5
		F+L+F	86.6		86.6	93.3	80	47.75		.99	46.2	65	27.5
		L+F	78.82		80	86.6	66.6	38.08		1.67	37.5	57.5	20

82. Experiment 3: Sets C, D, F, G.

DELAYED TESTS

Set.	Age.	Group.	Average per cent. Grip.	Coefficient of Reliability between Groups, Grip.	M.	Q ₁ .	Average per cent. Atmosphere.	Coefficient of Reliability between Groups, Atmosphere.	M.	Q ₁ .	Interval since Lesson. Weeks.
C	13.2	F+L	80	1.5	80	100	99		100	100	6
		F+L+F	86.5	1.8	100	100	100		100	100	
		L+F	74.73	2.8	80	80	100		100	100	
D	13.3	F+L	63.7	.178	60	80	97		100	100	6
		F+L+F	63.3	1.26	60	80	93.3		100	100	
		L+F	73.8	1.8	80	80	100		100	100	
F	12.11	F+L	76	7.45	80	90	100	5.45	100	100	9
		F+L+F	42	6.5	40	70	64	6.47	80	100	40
		L+F	40	.31	40	70	68	.83	60	100	40
G	12.8	F+L	62.1	.6	60	80	90.5	1.19	100	100	26
		F+L+F	66.6	2.68	60	100	83.3	2.65	100	100	40
		L+F	47.7	3.6	40	60	73.3	1.19	90	100	40

83. Conclusions. Experiment 3: Sets C, D, F, G. These methods appear to have been of equal value with the sets under consideration. The scores of the groups within the sets are close in the immediate tests, and no one method is uniformly superior. In Set D, the group seeing the films twice has better results in the short-answer test than the other groups, but in Set G, the Film + Lesson group scores most highly in the same test. The scores are again close in the delayed test. In Set G, Group II., Film + Lesson + Film does better than Group III., Lesson + Film. The superiority of the Film + Lesson group in the delayed tests of Set F does not establish even for this set the superiority of the method used with this group over the other methods. The two other groups confused their memories of the reels on the Stone, Bronze, and Early Iron Ages, not a matter for wonder since in a short space of time they had seen three reels depicting man in a simple state of civilisation, in all of which the people performed much the same actions, spun, wove, made baskets and pottery, and hunted. The additional group was not confused, since these girls had not seen the earlier reels. This confusion occurred in other groups, but not to the same extent. The reason is probably that Set F saw the reels with far shorter intervals between than did the other sets. The children's difficulty in differentiating these reels suggests that similar films should not follow each other. The most notable point in the delayed essays is the vividness with which all groups remember some of the scenes, those chiefly connected with the illness and death of the chief and the druidical ceremonies. The children describe these as though they were visualising strongly. Hence the high marks in all sets for atmosphere. The same feature is apparent in Experiment 4, where the children vividly recall incidents on the march of the Roman army and the battle.

84. Experiment 3 with Set H, Boys aged 14 years 10 months. The same procedure was followed with these boys as with the other sets, but Reel II. of the Roman Britain film was used. The new set of boys saw the film first and then had the lesson. This test was given :—

- (1) Draw a plan of a Romano-British town, indicating the chief buildings.
- (2) Describe life in Roman Britain in the second and third centuries.

Forty-five minutes was allowed for the test. The essays were good. The marks for information, the quantitative mark, for this set in Experiments 3 and 4 are low merely because one boy, observant and a quick writer, gave extraordinarily minute detail ; his marks were taken as the maximum. The essays of the other boys were more selective but very adequate, as the mark for grip indicates. These boys do not appear to have profited more from any one method of procedure than the other.

EXPERIMENT 3: IMMEDIATE TEST—SET H

Set.	Age.	Group.	Average per cent. Plan.	Coefficient of Re-liability between Groups. Plan.	M.	Q 3.	Q 1.	Average per cent. Essay. Information.	Coefficient of Re-liability between Groups. Essay. Information.	M.	Q 3.	Q 1.
H Boys	14.10	F + L	75.29	.95	70	90	60	55.7	.42	57.1	73.4	32.6
		F + L + F	79.47	1.55	80	90	60	57.78	1.05	57.1	77.5	44.9
		L + F	67.89	1.1	70	80	50	50.82	1.89	51	63.2	40.8
			Average per cent. Essay. Grip.	Coefficient of Re-liability between Groups. Essay. Grip.	M.	Q 3.	Q 1.	Average per cent. Atmosphere.	Coefficient of Re-liability between Groups. Essay. Atmosphere.	M.	Q 3.	Q 1.
			62	.036	60	70	60	96.47	2.21	100	100	100
			62	.62	60	70	50	85.26	2.19	100	100	60
			60	.57	60	70	50	85.26		100	100	60

85. **Experiment 4 of the Formal Series.** Reel III. of "Roman Britain," the reel describing warfare between Romans and Britons, was shown. The lessons were 40 minutes long. Group I. saw the film with a running oral commentary and with frequent stoppages, when detailed explanations of the equipment, tactics, and so forth shown on the screen were given. Group II. had a 25 minutes' lesson on the subject matter of the reel before seeing it, while Group III. saw the reel and then had 25 minutes' discussion. Groups II. and III. used in the lessons large still pictures of a Roman soldier and British warrior. The film was shown silently to Groups II. and III. The test quoted at length in paragraph 67 was given to all sets, A to G.

86. **Results with Set A : Girls aged 10 years 9 months.** The abbreviation "Sim." is used for the simultaneous film and talk given to the first groups in all sets.

EXPERIMENT 4: IMMEDIATE TEST—SET A

Set.	Age.	Group.	Average per cent. Drawings.	Coefficient of Reliability be- tween Groups. Drawings.	M.	Q ₃ .	Q ₁ .	Average per cent. Short- Answer Test.	Coefficient of Reliability be- tween Groups. Short-Answer Test.	M.	Q ₃ .	Q ₁ .	Average per cent. Essay.	Coefficient of Reliability be- tween Groups. Essay.	M.	Q ₃ .	Q ₁ .
A	10-11	Sim.	52.6	} 1.22 }	54	64	48	62	} .99 }	70	80	50	44.5	} .97 }	50	70	30
Girls		L+F	56.6		58	72	40	67.5		1.19	75	80	50		39.5	.44	40
		F+L	52.6	} 1.22 }	54	64	32	71	} .51 }	70	90	60	42	.6	40	60	30

EXPERIMENT 4: DELAYED TEST—SET A

Set.	Age.	Group.	Average per cent. Grip.	Coefficient of Reliability between Groups. Grip.	M.	Q ₃ .	Q ₁ .	Average per cent. Atmosphere.	Coefficient of Reliability between Groups. Atmosphere.	M.	Q ₃ .	Q ₁ .	Interval since Lesson. Weeks.
A	10-11	Sim.	64.7	2.4	60	80	50	95.2	2.56	100	100	100	
Girls		L+F	53.5	1.4	60	80	40	78.8	2.1	100	100	40	23
		F+L	55.8	.6	60	80	40	81.1	2.6	80	100	80	

There are no statistically significant differences between the groups either in the immediate or the delayed tests.

87. Experiment 4: Results with Set B, Boys aged 11.

IMMEDIATE TEST

Set.	Age.	Group.	Average per cent. Drawings.	Coefficient of Reliability between Groups. Drawings.	M.	Q ₁ .	Q ₃ .	Average per cent. Answer Test.	Coefficient of Reliability between Groups. Short-Answer Test.	M.	Q ₁ .	Q ₃ .	Average per cent. Essay.	M.	Q ₁ .	Q ₃ .
B	11	Sim.	66	5.8	66	72	56	76	1.43	80	90	70	44	40	50	40
Boys		L+F	79.6		82	88	72	89		90	100	80	44	45	60	30

EXPERIMENT 4: DELAYED TEST—SET B

Set.	Age.	Group.	Average per cent. Grip.	Coefficient of Reliability between Groups. Grip.	M.	Q ₁ .	Q ₃ .	Average per cent. Atmosphere.	M.	Q ₁ .	Q ₃ .	Interval since Lesson. Weeks.
B	11	Sim.	46		50	60	30	95	100	100	100	9
Boys		L+F	53.5	2.3	50	60	50	98	100	100	100	

Again, the results are inconclusive, the only statistically significant result in either immediate or delayed tests giving a superiority to the lesson followed by the film in the drawing test.

88. Experiment 4: Results with Sets C, D, F, G, aged about 13.

IMMEDIATE TEST

Set.	Age.	Group.	Average per cent. Drawings.	Coefficient of Reliability between Groups. Drawings.	M.	Q ₃ .	Q ₁ .	Average per cent. Short-Answer Test.	Coefficient of Reliability between Groups. Short-Answer Test.	M.	Q ₃ .	Q ₁ .	Average per cent. Essay.	Coefficient of Reliability between Groups. Essay.	M.	Q ₃ .	Q ₁ .
C	13.2	Sim.	62.4	.95	64	72	52	75.5	.74	80	90	60	66.5	.87	60	80	50
		L+F	66	1.11	70	80	56	70.5	.98	70	90	60	72	.87	80	90	40
		F+L	58	1.77	58	75	44	75		80	90	60	66.5		60	90	50
D	13.3	Sim.	76	1.37	76	88	68	81	1.2	90	90	70	35	2.8	30	50	20
		L+F	80	1.108	84	88	72	85.5	.98	90	100	70	49	1.67	40	60	40
		F+L	72.6	2.51	76	84	60	89		90	100	80	44	.92	50	60	30
F	12.11	Sim.	58.9	3.6	60	64	48	69.47	.14	70	90	50	41.57	1.87	35	60	30
		L+F	68.8	6.14	66	84	60	70	.14	70	80	60	48.7	2.2	47.5	65	40
		F+L	76.2	2.37	76	88	64	70		65	80	60	51.9	.65	45	75	30
G	12.8	Sim.	73.26	3.26	80	88	60	76.84	3.28	80	90	60	50	2.34	45	80	35
		L+F	85.8	2.2	86	96	72	86	3.56	90	90	80	63	2.64	65	80	45
		F+L	81.8	1.54	84	88	76	91	1.31	80	100	70	64.2	2.6	62	80	50

89. Experiment 4: Sets C, D, F, G.

DELAYED TEST

Set.	Age.	Group.	Average per cent. Grp.	Coefficient of Reliability between Groups. Grp.	M.	Q ₁	Q ₂	Average per cent. Atmosphere.	M.Q.	Q ₁	Q ₂	Interval since Lesson. Weeks.
C	13.2	Sim.	78	$\left. \begin{array}{l} 1.33 \\ 1.4 \\ .09 \end{array} \right\}$	80	60	100	96	100	100	100	9
		L-F	71		60	50	100	97	100	100	100	
		F+L	70.52		60	60	100	90.52	100	100	80	
D	13.3	Sim.	68	$\left. \begin{array}{l} 3.3 \\ 3.3 \end{array} \right\}$	60	60	80	100	100	100	100	9
		L+F	57.5		60	50	60	98	100	100	100	
		F+L	68		60	50	80	100	100	100	100	
F	12.11	Sim.	57.5	$\left. \begin{array}{l} .54 \\ .02 \\ .56 \end{array} \right\}$	60	40	80	96	100	100	100	9
		L-F	55		60	40	70	99	100	100	100	
		F-L	57.8		60	40	70	100	100	100	100	
G	12.8	Sim.	73	$\left. \begin{array}{l} 1.79 \\ 63.68 \\ 73.3 \end{array} \right\}$	80	60	100	95	100	100	100	25
		L+F	63.68		60	40	80	92.6	100	100	80	
		F+L	73.3		70	40	100	90	100	100	80	

90. Conclusions from Results of Experiment 4 with Sets C, D, F, G. Between the equated groups there are few significant differences. When, however, the results from the four groups are considered together, four tentative suggestions as to method may be made :—

- (1) For the realisation of detail of equipment it is preferable to teach the detail first by means of a still picture and afterwards to run the film straight through, rather than to use the stopped film method, for in every case in the immediate tests the drawings of the “Simultaneous” groups are worse than those of Group II., the “Lesson+Film” group, and in Sets F and G the difference is significant.
- (2) In general, for gaining information, lessons before or after the film are better than the stopped film method, since in Sets D, F, G in the short-answer test, the “Simultaneous” group achieves the worst results ; in Set C the scores of the “Simultaneous” and “Film+Lesson” groups are equal, and slightly better than those of the “Lesson+Film” group.
- (3) Also, if it is wished to stress some aspect of the subject matter of the film, it is better to take time for discussion of the reel before or after its showing, rather than to stop the film and talk, since in every case the worst results are obtained in the set essay in the immediate tests with the stopped film.
- (4) For sheer memory of the film, the stopped film method and a running oral commentary seems as good as the other methods, since in the delayed test and free essay on the film, this method gives the best results in the mark for grip in Sets C and G, and is first equal with the Film+Lesson method in Set D. The scores are almost identical for all groups in Set F. In these delayed tests, the marks for atmosphere might be expected to be close, as they are, for all groups saw the film. As in the preceding experiment, memories of this reel were fairly complete, and in almost all cases extremely vivid.¹

91. Experiment 4 with Set H: Boys aged 14 years 10 months. The same methods were again adopted as with the other sets, but a slightly different test given. Tests A and B, taking respectively 10 and 5 minutes, were the same. The essay, for which 25 minutes were allowed, was : “Compare and contrast the Roman army with that of the Britons, explaining fully the former’s success.” The low mark for “Information” in these essays is due to the outstanding excellence of one boy, as explained in paragraph 84. These results were reached :—

¹ These purely formal results are of less value than the experience gained from the many informal tests. There, a combination of methods proved helpful. The teacher may give a preparatory lesson and also make a few oral comments when showing the film, or stop it occasionally.

92. Experiment 4: Set H.

IMMEDIATE TEST

Set.	Age.	Group.	ESSAY.				
			Average per cent. Answer Test.	Coefficient of Reliability between Groups. Short-Answer Test.	Average per cent. Information.	Coefficient of Reliability between Groups. Information.	Average per cent. Grip.
H	14.10	Sim.	79.6	.74	35.08	1.57	86
Boys		L+F	82	.88	42.9	1.26	.819
		F-L	82.1	.029	38.34	.878	.23
							.96
							98.94

EXPERIMENT 4: IMMEDIATE TEST—SET H (continued)

Set.	Age.	Group.	ESSAY.				
			Short-Answer Test.	Information.	Group.	Atmosphere.	
H	14.10	Sim.	M.	M.	Q ₁	Q ₂	Q ₃
			84	76	90	100	80
Boys		L+F	88	64	90	100	100
			88	92	90	100	80
		F+L	84	92	90	100	80
							100

93. **Discussion of Results : Set H: Experiment 4.** The results from the three groups are close. The only real differences occur in the marks for atmosphere in the essays. The "Lesson+Film" groups do less well here because the pattern of the preliminary lesson seems to be more impressed on the boys' minds than does the film. Asked to compare the Roman and Britons' armies, one boy reproduced the skeleton black-board summary practically verbatim, and attempted nothing else. He instances, in its most extreme form, the tendency of the whole group. In general, however, this test is entirely inconclusive.

94. **Midscores.** The figures showing the midscore and the inter-quartile range of each group of marks have been given with the average percentage marks for the tests, but these figures merely serve to show that differences between the scores of the equated groups are rarely striking.

95. **Correlation between Scores in the Intelligence Test and in Film Tests.** The correlation between pupils' scores in the intelligence test and in the film tests was explored by the application of Spearman's "Footrule" formula to the results of the short-answer test and the essay test in the immediate tests of Experiment 2 A, with Sets C, D, F, G, pupils aged approximately 13. These essays were marked objectively for information.

Set.	Coefficient of ¹ Correlation between scores in Intelligence Test and in Short-Answer Test.	Coefficient of Correlation between scores in Intelligence Test and in Essay Test.
C	.323	.323
D	.58	.354
F	.429	.242
G	.677	.444

A substantial correlation might have been expected and is found in the results of the short-answer test, save in Set C. The degree of correlation is less in the essay test; this is no doubt partly because, as has been explained, the children had not time to finish the essays.

¹ Interpretation of Coefficient of Correlation :—

0 to \pm .4 correlation is low.

\pm .4 to \pm .7 correlation is substantial.

\pm .7 to \pm 1.0 correlation is high.

Cf. *How to Measure in Education*, McCall, 393.

96. Summary of Conclusions from the Formal Tests :—

A. EXPERIMENT 1.

The results of Experiment 1 corroborate the general view of the value of illustrations for purposes of History teaching. (46, 47, 48, 50, 51.)

B. EXPERIMENT 2.

- (1) As far as these four tests are concerned, where no discussion followed the film, the usual type of lesson seems of more value for pupils aged 10 to 11 than the use of the film. (74.)
- (2) The two experiments with one reel with boys aged 12 years 3 months suggest that for children of this age :—
 - (a) A short film helps them to learn and to remember facts.
 - (b) A still picture is better than an uninterrupted film for learning details of dress and equipment.
 - (c) The film is of more value than the still picture for giving a unified realisation of complicated and related movements, *e.g.* the battle in the “ Roman-Britain ” film. (69, 75.)
- (3) The experiments with children aged approximately 13 suggest that with pupils of this age :—
 - (a) A short film creates a more permanent impression both of facts and atmosphere than ordinary lessons. (56, 60, 61.)
 - (b) A long film, shown without accompanying lessons, is of no more value than a story told by the teacher ; this also applies to the boys aged 12 years 3 months. (72, 73.)
- (4) The two experiments with boys aged 14 years 10 months suggest that suitable films are likely to be of value to boys of this age both for giving grip of fact and sense of atmosphere. (72, 73, 77.)

C. EXPERIMENT 3.

The scores indicate little difference in result whether a film is shown twice or only once in the space of one lesson period, but most children of 12 and older expressed preference for seeing the film only once and having longer time for discussion ; then they felt more sure of the facts. (81, 82, 83, 84.)

D. EXPERIMENT 4.

If only one period is to be spent on a new topic with children aged 13, it is better to show the film straight through and take longer time for discussion, etc., than to spend all the lesson showing the film with very frequent stoppages for explanation. (88, 89, 90.) ¹

¹ These conclusions, like those given at the close of the following chapter, are in the nature of interim findings ; the final conclusions of the enquiry are given in Chapter XVII.

CHAPTER V

THE SEMI-FORMAL TESTS

97. Procedure in Semi-Formal Tests. The chief interest in these semi-formal tests lies in the fact that they pointed the way to the informal experiments of the later months of the enquiry. The tests of this second type were themselves of an informal nature, but since comparative groups were used, this nomenclature was adopted to distinguish them from both strictly formal and informal experiments. The groups were formed simply by division of the class concerned into two groups approximately equal in ability according to the results of school examination marks and the class teacher's judgment. The tests, 13 in number, were taken in the same weeks in which the formal experiments were in progress, because in themselves the formal experiments were insufficient in number for the drawing of even tentative conclusions on the value of the film.

98. Marking of Essays. In all these cases the immediate tests consisted of essays, sometimes a definite question, sometimes a free essay on the film. With one exception the delayed tests were of the kind already used with the formal groups. Both immediate and delayed tests were marked by the teachers on a plan like that already described,¹ a separate round mark for style, for grip or the main points of information, and for atmosphere or spirit. Saving an initial agreement as to the general connotation of these terms, each teacher was left free to establish his own criteria as to the quality of the essays. The teachers recognised the method as merely an analysis of a usual practice, and as a meaningful method of evaluating results. It is on this critical examination of the essays that the teachers base their reports of the written tests. The mark for style was given with the object of isolating all considerations of grammar, spelling, writing and so forth, in the final judgment on the historical merit of the answer. Throughout the enquiry, the investigator read every essay after the teacher's marking, and any serious differences of opinion were discussed till an agreed mark was reached. The method of marking in all but the strictly formal tests is entirely subjective. It seems impossible to assess the essential qualities in an historical essay in any purely objective way. But in the majority of cases, apart from the formal tests, the verdict does not rest upon any one individual's opinion.

99. Provision of a Standard of Comparison with Usual Work. In some of these experiments, the control group had the oral lesson and wrote their essay before the film was shown, and were allowed to see the

¹ *Supra*, 41.

film along with the experimental group. This prevented a comparative, delayed test between the groups. In these cases a grade A, B, C, or D, based on the marks for grip and atmosphere, was given to the essay in the delayed test. Each child was also given a grade to represent his usual ability in history exercises. Much care was taken in fixing this grade; the teachers looked up the results of terminal examinations and examined notebooks, as well as relying on their own general knowledge of the child's historical ability. Hence, a fair standard of comparison between the results of the usual oral work and of the film lessons was obtained. An account of each experiment follows, those concerned with the same film being treated together.

100. Experiment 5. This test took place at an Elementary Church School in the Midlands. The class, a mixed group of boys and girls aged 12+, had been having lessons on the Seven Years' War. Half of them wrote an essay on the Wolfe episode after a revision lesson given by their teacher on the lines of the film. They then saw the film along with the rest of the class. The film was preceded by a short talk on the condition of affairs in America which led to the English attack on Quebec. The first and second maps in the film, showing the distribution of territory in North America in 1757, and the French position at the mouth of the St Lawrence, were sketched on the blackboard, since a non-stopping projector was to be used. The second half of the class wrote an essay after the film-showing. Very little difference could be seen in the two sets of essays. Those of both groups were satisfactory; the second group had grasped the story well from the film. But the teacher felt that films, as evidenced in this test, were of value. In this incident: "The difficulties to be faced can be appreciated and the children can see how well they are overcome. The film is full of action. The children learn the facts almost unconsciously and with evident pleasure." There was little to criticise on this type of film if it were used along with oral lessons which emphasised essential points. "Film and lesson make a perfect combination." A delayed test, an essay on the film, taken six months after the original experiment, did not lead to any revision of this judgment. The teacher considered that the children remembered the story more clearly than usual.

101. Experiment 6. The same procedure was followed with the Upper Standards of an Elementary School in Leeds, children aged 13+, and with the same result. The first essays differ little in film and non-film groups, nor do the grades vary much from normal in the delayed test. But the class teacher and Headmaster join in reporting on the delayed test that "the work was better remembered with the film than it would have been without it."

102. Experiment 7. The Wolfe film was shown to Form VA., aged 16 years 2 months, and Form VB., aged 15 years 10 months, in a Girls' Public School, about six months after their original study of the subject

in class. One group had a revision lesson given by their usual history teacher; the other saw the film. Of the immediate test, in which the girls were required to tell the story of the film, the teacher wrote: "There is extraordinarily little difference in the two sets of essays." A combined mark for grip and atmosphere gave this result:—

Form.	Film.	Non-Film.
VA.	63.3 per cent.	75 per cent.
VB.	65.7 „	60 „

The report continues: "The non-film essays show more knowledge of the Seven Years' War and the part played by the capture of Quebec in relation to the whole. They show this event in its right setting. The film essays, on the other hand, show a much more detailed knowledge of the actual incidents in the capture of Quebec. The former are more general, the latter more specialised." Yet this result did not leave the teacher feeling that the film could not be a useful teaching instrument. She writes: "I am not sure whether there is scope for the use of films in ordinary teaching or whether their chief use lies in revision work. I think films should be most useful for the latter purpose." It was only possible to give a delayed test to 15 girls who had all seen the film. Of these 4 gained their usual mark, 3 gained marks below and 8 above their average in a delayed test. The teacher reported: "I was agreeably surprised at the amount remembered after an interval of six months. All remembered the essential facts of the story. . . . Often minute details were noted. When commenting upon the amount of detailed information given in some of the papers, it must be remembered that the story is of peculiar interest. There is a certain strong dramatic interest in it and the bare facts are simple, so that it stands more chance of being remembered than many of the stories, with or without the aid of a film."

103. Experiment 8. Two groups were formed from 37 girls in Forms Lower IVa. and B. in a Girls' Secondary School, who had completed a study of the subject a week or two earlier. Their average age was 14 years 8 months. The investigator took a revision lesson with the control group. For the test, the girls were asked to tell the story of the film. Again the teacher's verdict is the same: "Most essays show a tendency to elaborate the details of the actual scaling of the Heights and of the subsequent battle on the Plains, at the expense of the more important points, and this is particularly noticeable in the essays of the film group. Apart from this there is little difference in the work of the two groups." The teacher felt that occasional films would be a useful supplement to History teaching, but more particularly those illustrating social and industrial life. The film group, however, did outstandingly better essays than the control group in the delayed test. The marks are:—

	Grip.	Atmosphere.
Film Group Average:	66 per cent.	84 per cent.
Non-Film Group Average:	32 „	10.6 „

The control group merely describe the climb and the battle with very little detail. They are not clear about operations. For instance, some girls seem to imagine that several thousand Britishers were hauled up the cliffs by ropes within easy distance of sleeping French sentries. The essays of the film group are longer and more complete. They show a better understanding of Wolfe's strategy and tactics, and are written with more élan. In this case, the film appears to have profited those usually backward in History. Of the 18 girls in the film group, 9 had their usual grade, one deteriorated from C to D, 8 improved. Two D girls reached C and C+; two C girls reached B and one A-; one girl in B rose to B+, and two so far as A. In the control group of 16 girls, 8 had their usual mark, 3 improved, 5 were lower than usual. Five C girls deteriorated to D. This last variation may be due to the difficulty of remembering a mass of complicated details, never more than partially realised from one period's oral instruction.

104. **Experiment 9.** This film was used in the same way with a younger class, boys aged 12+, in a Boys' Secondary School. These wrote an essay on, "The Events on the Night of September 12th," and a shorter answer on, "The Reasons for the English Success." The non-film boys answered this last question on the whole better than the experimental group, who tended to stress the minor points and miss the more fundamental reasons. The teacher considered that this was always bound to be a weakness with a film group, when inferences of this kind were demanded. In the three formal tests with classes of about the same age, the differences between the marks of the groups for this same question never attain significance, but in each case, such differences as exist are in favour of the non-film group.¹ The older boys of nearly fifteen had no difficulty in realising the factors of success from the film.² In the descriptive answer, the film essays in this school were inferior from the point of view of information; no differences in grip and in atmosphere could be discerned. Nor was there much dissimilarity in the answers in the delayed test taken six months later. The film papers were slightly more vivid in narrative, but the non-film group showed a better sense of balance. Yet these papers provide another example of the help of the film to the backward pupil, for the teacher reports: "Three papers at least of the film group are distinctly better than would have been the case under other conditions." This teacher considered that it would be difficult to get a film of the Wolfe type which would emphasise the more important points and at the same time retain interest. Consequently, the sphere of the film lay to him in social and industrial history.

105. **Experiment 10.** In the two other cases where this film was used, no real differences in the results from film and oral lessons could be discerned in either immediate or delayed results. In one case two Fourth

¹ *Supra*, 72.

² *Supra*, 72 and 73.

Forms, IVA. Upper and IVB. Upper, were divided. Their average age was 13 years 3 months. They had already studied the subject. The teacher gave the oral revision lesson to the control groups in each form. The control groups saw the film after they had written the essay. The children wrote answers on the causes of English success, which were marked for grip only. These results were obtained :—

	Film.	Non-Film.
IVA. Upper : average per cent.	55·7	50
IVB. Upper : „ „	47·5	46·2

The girls on the whole took their usual place in the form list, both in this test and in the delayed test taken six months later. To gain, or at any rate to remember, a balanced impression of the whole story from amongst the involved detail of the film, proved once more beyond the capacity of pupils of this age. After reading the delayed tests, the teacher wrote : “ They have very frequently confused what they happen to know with what they have seen, and imagine they have seen it. Some of the recollections are very disjointed, with occasional queer little sharp and clear memories of a particular incident, which they visualise over again very strongly, I think. I certainly think that such films are of real value. I do not think they should be used frequently, but the very settings are extremely valuable, and when taken, as many could be, on the site of the great events, there would be a special possibility of helpfulness.”

106. **Experiment 11.** The last experiment of this kind with the Wolfe film was also with a Fourth Form of girls aged about 14, who had just completed a study of the subject. The teacher took a revision lesson with one group. The essay was a free test on the film. The report runs : “ The differences in the essays in the two groups are due only to extraneous information imparted in the one case. There was extremely little difference in emphasis.” Eleven girls who had seen the film took the delayed test. The result for the whole class is average. Six retained their usual grade, two deteriorated and three improved. It is noteworthy that the two who did worse than usual were the only two girls in the group designated by the teacher as of A ability—one of these dropped to B+ and one to B ; and that those who improve are dull children. One girl rises from C to B, two from B to A. Again, judging from this experiment, the teacher considered that films were of value, though their use must be limited in scope. She thought that the girls benefited from such things as the visualised picture of the stand before the English attack, and of the climbing of the Heights. The costumes and such details were vivid and impressive. The films gave, too, a clearer sense of distance in time.

107. **Experiments 12, 13, 14.** In none of the three cases where the Naval Warfare film was thus used, as a revision film with comparative groups, did the written tests show an advantage for the film. The first case was with a boys' Lower Fifth Form, aged 15+, in a Secondary

School; the second with a Fourth Form, aged 14 years 8 months, in a Girls' Secondary School; the third with a Fifth Form, aged 15 years 9 months, in a Girls' Public School. In each case an outline of naval events from 1793 to 1805, strictly what the film purports to teach, was demanded as test. In the first and second cases, to quote the words of the boys' master, the differences in the essays "are so slight as to make the test inconclusive." The film made but a slight impression. The experimental groups obviously relied on their previous lessons, scarcely at all on the film, in doing their answers. Of the boys, their master writes: "The work was revisionary, and both the revision lesson given to one half of the form and the film shown to the other half seem to have had the effect of reviving memory of the original lessons on the period. Two boys who saw the film seem to have written in their essays about those parts of which they had heard before, and they ignored the scenes which gave pictures of naval life." The girls' mistress says: "When taking the course of lessons, I gave them two compositions, one on the Battle of the Nile and the other on Trafalgar, and I fear in the outline essay these two events loom so large that the rest are almost eclipsed." In the third case, the essays from the film group were inferior to those from the control group. Only in the second case, in the Girls' Secondary School, was a delayed test taken, and there is little difference between the answers of the groups. Yet the teachers from these three schools, equally with those where the Wolfe film gave positive results for the film in the delayed tests, felt that there was scope for the film in school. How do they form their judgments?

108. Experiment 15. Procedure. The teachers' methods of arriving at conclusions, relying on other factors than the essays of the divided classes, is aptly illustrated by the reports of the following experiments from one school. Each form of a Girls' Secondary School, from Form IVB., aged 13+, to Form VI., was divided into two groups of approximately equal ability. The investigator gave a lecture to Group I. on the subject matter of the League of Nations film. A large, coloured wall-map of the world and a pointer were used to indicate any geographical features. The blackboard was also used for sketches and summaries. For instance, a list of the five chief parts of the League organisation—Assembly, Council, Secretariat, I.L.O., the Court—was written on the blackboard, and a sketch-map drawn of the new European states formed after the war. All figures, like the £70,000,000,000 expended by the world on war, were also written on the blackboard as they were mentioned. The girls who heard the lecture wrote an essay on "What I learned from the Lecture." This group and Group II. saw the film on the following day. Group II. then wrote an essay, "What I learned from the Film." Group I. wrote a second exercise, "In what matters and in what ways did the Film help you to understand better what you had been told at the Lecture?" After the written work had been done, the children were questioned as to their impressions of the film.

109. **The Teachers' Report on Experiment 15.** The teachers' report on the experiment is quoted verbatim :—

“**RESULTS : I. WRITTEN WORK.** In the marks awarded for general grip Group I., the lecture group, averaged 65·6 per cent., Group II. 65 per cent. Group I. had the best papers ; 13 girls had 8 points or over out of 10 as compared with 6 girls in Group II., but the average girl grasped more from the film ; between the bottom girls in each group there was little to choose, the subject matter and the length proved beyond them. Both groups made the same type of mistake in details such as spelling of names, inaccuracy in reproduction of figures.

Group I., in writing the second essay, are almost unanimous in praising the maps as of great assistance in making clear the extent of the war, and in stating that the film is more realistic and more graphic, especially with regard to the attendant horrors of war. Six girls comment on the illustrations of street fights, etc., favourably ; one found them rather childish, one unnecessary, and three complain that the John Bull episode was too long drawn out, that the time might have been used to greater advantage in leaving the maps on a little longer, for whilst they were ‘clearly shown there was not time to grasp and remember them.’ Many were more impressed by the size, importance, and watchfulness of the League as shown in the picture than as described in the lecture. Most girls found the film more interesting. Two claim that pictures impress the mind more deeply—an equal number deny that this is so. Some enjoyed the scenery of the Aaland Isles and the Grecian frontier. One girl objected to them as side-tracks which tended to obscure the main point. Only one girl, apparently, realised that from the pictures of the Aaland Isles could be gathered why two countries were anxious to possess them. Twelve girls were impressed by the financial statements, but one girl here and one girl of Group II. had so far misunderstood as to think that the £97,000 which Great Britain contributed to the League was the League's small contribution to us, to help us to pay our war debts.

There are numerous unfavourable comments that reasons or causes—either for the war or for later disputes—are not made clear ; girls who comment on its clearness in this respect have invariably misunderstood and take the murder as the cause of the war except in two cases—one girl in each group has taken the street fight at the beginning of the film as the cause of the war. Some complain of the too frequent reappearance of Geneva, one complains that no one would know how to pronounce the names of places. On the whole, one gathers from this essay that the class was impressed by the war and hospital scenes, but found the lecture easier because the reasoning was more developed or more obvious. One girl comments favourably on the breaks in the film (*i.e.* time for re-threading) as giving time ‘to revise in the mind’ what has been seen.

The work of Group II. on the whole bears out the comments of Group I. ; the cause of the war is usually omitted or wrongly stated to be the murder, and few girls have grasped at all the organisation of the

League. Despite the frequent appearance of Geneva on the film, it here appears as Vienna and as Verona. The class are by no means clear as to the difference between the cost of war and the present debt charges or expenditure on armaments. Other minor errors consist of the substitution of Norway for Finland, or Prussia for Russia. A few papers show lack of discrimination between the parts of the film—greater prominence is given in one paper to the street fight than to the League of Nations.

2. ORAL WORK. In discussing the film with the girls very much the same points were repeated.

- (a) *Maps*. These were generally commented on first as being very good—but too quickly shown to learn ; and if not to be learnt, then a waste of time. No one seemed to understand that an impression of vastness could thus be gained and that this was more important than details.
- (b) *Illustrations* : *e.g.* John Bull, garden, street fight. The majority seemed to have found these helpful but too long drawn out ; the higher the form, the more they were criticised or found unnecessary.

John Bull was said to find the whole burden easier to carry than the war charge alone.

The street fight was generally thought the best illustration as having more action and being more amusing—hardly the right spirit for a League film !

Most seemed irritated by the frequent occurrence of Geneva.

- (c) Some girls objected to the breaking of the film by still pictures, *e.g.* Orpen's Peace Treaty and the photograph of President Wilson, instead of the same man giving a speech.
- (d) Some evidently long for talkies—there was a general feeling that one should know something of the speeches delivered, *e.g.* of the arguments for giving the Aaland Isles to Finland.
- (e) One class thought the impression produced was that the League settled frontier disputes—and nothing else.
- (f) A general complaint was that there was no opportunity for asking questions such as :—
 - (i) Why did not America back up President Wilson ?
 - (ii) What is I.L.O. ?
 - (iii) Why did two countries want the Aaland Isles ? Why was it settled for Finland ?
 - (iv) Explanations of League technique and organisation.¹
- (g) *Attention*. Most girls thought that to get an equal amount of information or grasp of the subject more attention is necessary when looking at a film than in listening to a lecture—no repetition is possible, if one does not attend one gets nothing, whereas in class if one turns aside for a moment one hears without

¹ Points (d) and (f) provided very early evidence that the film awakens real interest—a desire to know more.

thinking and remembers it later, or the mistress pulls one up by a question. Some, however, thought that repetition, e.g. Geneva, the clock, rendered attention unnecessary, especially as there was much detail that did not matter.

TEACHER'S CRITICISM. It is unnecessary to repeat what has already been pointed out above. Few points require comment :—

- (1) *Attention.* The class seemed to attend closely throughout ; during an interval I was asked questions about language difficulties when so many nations sent representatives—this and the questions in (f) above prove that their minds were active and not passive.
- (2) *Length of Film.* The attention did not seem to flag, and all the girls deny that the film as a whole was too long, though many would redistribute the proportions : against this, however, must be put the evidence of the written papers, which show that the weaker girls were overtaxed and that few grasped the League Organisation. This may have been due to weariness—but of course this section of the film was not so attractive to children, as it lacked action and the subject matter was more difficult and more unusual.
- (3) It was quite clear to all the staff who were able to see the film that the children were very keen on the street fight, and that some were a little disappointed when the garden problem was settled up without a repetition of the trouble.

The film and the lecture were both very good—and I can only agree with the children that for realisation of scenery, horrors, and events the film is best—but for reasoning, explanations of events, and the more thoughtful side of the subject, a discussion of the subject, if not a formal lesson, is quite necessary to supplement it. Which is preferable if one only can be given is a matter of opinion.”¹

110. Delayed Test : Experiment 15. Four months later a delayed test was taken. Of the 32 girls remaining from amongst those who had merely seen the film, 13 improved on their usual grade, 11 deteriorated, 7 had their average mark. Of the 27 who both heard the lecture and saw the film, 10 improved, 12 deteriorated, 5 were average. It is strange that those who had both types of instruction do not achieve better results than those who only saw the film. It is again cause for comment that it is the backward children who improve, the usually bright who fall below their general standard. The teacher reported : “ Few remember with accuracy figures and names. The general idea seems to have impressed the vast majority.”

111. Experiment 16. In the same school the Roman Britain film was used in the first place with a divided class, in the second with two

¹ The whole experiment bears witness to the value of a combination of method.

parallel forms. Form IVB., a class of 12, whose average age was 15 years 9 months, had studied Roman Britain, in September. The following June, the History Mistress gave Section A a revision lesson on the lines of the film, and for home-work the girls answered three questions based on the lesson. Section B had no lesson, saw the film, and answered the same questions. The report runs :—

“ The results are in the order (taking each group separately) that was to be expected from the usual standard of work, except that Margaret X. is higher in Section B. This may show that her visual memory is better developed, or that her attention does not flag so easily when excited by an unusual method of teaching.

Section B is lower on the whole than Section A ; may I suggest that this is probably due to—

- (a) Inexperience in reproducing in words the main points from a visual representation ; and
- (b) The fact that in class teaching the children have the words to remember and may ask the teacher questions on any point not clear, whereas in a film the explanations given are heard as the attention is possibly distracted by some other—maybe minor—incident on the screen.

In addition to answering the questions every girl (whether she had had the lesson and written the answers before seeing the film, or was depending on the film alone for her revision) was asked to write a criticism of the film and its use in teaching.

The consensus of opinion is that a lesson followed by a film would be ideal, but, as one girl remarks, the syllabus would not be covered in the time ! Most found the film interesting, and thought it made clear the details of daily life, but there were many criticisms. Several thought it did not come up to teaching by a mistress—presumably the oral lesson—because it does not drive home the main points, it is impossible to take notes by which to remember it later, one is apt to remember the funny incidents rather than the important points, and it is not so easy to reproduce as words. Three think it tends to check the imagination by destroying the need for it, one thinks it good for the unimaginative, and one thinks it assists the imagination. One criticises the film adversely as rendering concentration unnecessary. Some thought it would check wrong impressions, one thought wrong impressions might be more easily gained. Two found the battle unconvincing. One remarks that ‘ it would not always be new.’ ”

112. Experiment 17. The parallel forms in this school who also saw the Roman Britain film were in the first year of the four years’ course, their average age being 12 years 10 months. They had learned about Roman Britain nine months before the experiment. Form IIIA. had a revision lesson, answered questions, and then saw the film of which

they were, unexpectedly, asked to give an impression. Form IIIA. saw the film and answered the questions.

- (a) **THE IMMEDIATE RESULTS.** The teacher reported : " The results from the lesson are a little better than from the film. No girl in IIIA. takes a noticeably higher place than is usual after an ordinary class lesson ; two girls are lower than usual. I should suggest two reasons for Form IIIA. (film) being lower than IIIA. (lesson)— inability to formulate words from visual images owing to lack of experience in this type of work, and a foolish desire to show off by putting in things not learnt from the film, and in doing this leaving out many points which oral questioning proved they had grasped from it.

The criticisms of IIIA. are naturally much less developed than those of VB. One girl said ' it was not so easy to understand except from the point of view of description ' and thought a mistress taught better ; one thought it would be less easy to write answers from. The rest had nothing but commendation for one or another part of the film : one girl put it very naïvely, ' In the lesson I want to talk, but the pictures in the film keep me from talking they are so interesting. ' "

Many criticisms of the film from the teacher's point of view follow. These can be more conveniently discussed later in the report. The teacher's final conclusion is : " On the whole, the children benefited greatly from the film and realised far more clearly the life of those times. "

- (b) **DELAYED RESULTS.** Full discussion of the delayed tests, since these largely amount to criticism of the film, can also be more fittingly postponed. The essential points for the moment appear to be that the children remembered more than they had time to write in the 40 minutes allowed, but that " the disjointed nature of most answers proves that separate points were remembered rather than general connected impressions. " It is suggested in paragraphs 341-5 that the disconnected nature of delayed essays on this film is due to the form of the film itself. The general result in this case appears to be slightly above the average. 27 girls improve their grade, 16 deteriorate, 5 remain the same. The 6 best girls deteriorate, the 9 worst improve. There are only 3 D girls in the groups. They reach C —, C —, and C. All the 6 C — girls improve a little.

113. Conclusions drawn from the Semi-Formal Tests.

- 1) These tests help to confirm the findings of the formal tests that the film helps children to remember. Eleven delayed tests were taken. The scores have been indicated. In Experiment 8, where the comparative groups took the delayed test, the film group do strikingly better than the lesson group.

In Experiments 5 and 7 distinctly more than usual was remembered. In Experiments 6 and 16 a less marked but recognisable improvement in memory was noticed. The weaker children remembered more than usual in Experiments 9, 11, 15, and 17. No variation from normal appears in Experiments 10 and 13.

- (2) The film seems particularly to aid the backward children; their essays show greater knowledge of fact and sense of atmosphere. (Experiments 1, 8, 9, 11, 15, 16, 17.)
- (3) A few children usually good in History take a lower place than usual in film tests. (Experiments 11, 15, 16, 17.)
- (4) The value of the film appears far more in class discussion than in written tests. The teachers found that the immediate essays of film and non-film groups were not markedly dissimilar, but they felt from their discussions with their classes that the children had gained from the films. They had seen things in their correct setting (Experiment 10), or obtained clearer notions of earlier times (Experiment 16), seen events more realistically portrayed (Experiments 5, 11, 15), been stirred to interest, to ask questions and criticise (Experiment 15). All the teachers felt that the film could be advantageously used in school; they founded their opinion chiefly on personal contact with their class after the film-showing.¹

114. **Adoption of Informal Tests.** Hence it was decided to place far more reliance on discussion lessons after the film, and to adopt a completely informal method of investigation. The reasons for the change are discussed in detail at the commencement of the next chapter.

¹ Cf. *supra*, 96 (D).

CHAPTER VI

THE INFORMAL TESTS

I. REASONS FOR ADOPTION.—II. INFORMAL TESTS IN THE AVERAGE ELEMENTARY TOWN SCHOOL

I. REASONS FOR ADOPTION OF INFORMAL TESTS

115. **The Insufficiency of the Formal Experiments.** The formal experiment with the use of comparative groups, apparently more strictly scientific than any other method, proved on use to be entirely fair neither to usual methods nor to the film. The test was unfair to the oral lesson in that the necessity for covering the same ground as the film in a given time destroyed one specific advantage of oral teaching over mechanical means, the ability to proceed at the pace of the child. Moreover, in teaching, so long as the children realise certain main trends, it is immaterial what precise detail is noted in the lessons. It is of no moment that a teacher has omitted to tell a class studying the Stone Age that the women probably sewed with bone needles, if, on the other hand, some interested question from a child has led to the last few minutes of the lesson, originally meant to be spent on talking of the making of garments, being given to a detailed description of, say, the throwing-stick. The most orthodox of teachers, whilst not pandering overmuch to the child's love of side-tracks, should let his class to some degree influence the direction of the lessons. This is difficult if that same class must be able on the following day to answer twenty questions on detail, necessarily predetermined by what a corresponding group can acquire from a film. This last disadvantage was avoided, in all save the immediate tests of the purely formal experiments, by the setting of essays only. These allowed for judgment on the child's general impression rather than on the presence of particular details. The difficulty would have been less in the case of a big topic carried on over several periods of instruction. Even then, the other disadvantages of the method would not have been removed.

116. **The Shortcomings of the Free-Essay Test.** The preference shown in the enquiry for the free essay rather than the definite question has already been explained.¹ But its shortcomings are very apparent. As a measure of the actual attainment of the child it leaves much to be desired. Scholars up to the age of 13 or so, when asked merely to tell the story of the film, are apt to deal with the incidents in which they were specially interested to the exclusion of the rest. Their essays by no means represent

¹ *Supra*, 40.

all they know. Young boys who have seen the Wolfe film give an outline account of the attack on Quebec very similar to the essays of those who have been told the story orally. Inevitably, little of the child's new knowledge of ships, accoutrements, artillery, appears in his story. Time forbids. Yet the knowledge is often there, as discussion shows. Further, many children in writing essays are hampered by their difficulty in expression. A child may say, "The people are more real on the film than when we just hear about them," yet his essay after seeing a film be no more spirited than usual. It is in these ways that written tests are unfair to the film. The film groups were asked to translate visual impressions into terms of speech and in a limited time, in spite of the unaccustomed nature of the exercise.¹ It seems impossible in written tests to avoid both horns of our dilemma. After an oral lesson the child gives us back our own words. We somewhat complacently assume that he attaches to them the value they have in our own minds. The results of Experiment 1 are a warning against a too easy optimism on this head. On the other hand, after more purely visual instruction the child cannot so easily find words to express either what he knows or what he feels. The free essay, though to a less degree than the short-answer test and the longer set question, is still an unsure index of the facts gained, the interest roused, the emotions stirred. The shortcomings inherent in each type of test are but little counteracted by their combination.²

117. Oral Discussion as a Test of the Value of the Film. By the time the experiments already described had been carried out, the investigator had received a very definite impression as to the special contribution of the film to History teaching. The impression arose out of lessons taken with pupils after seeing the films and from many less formal discussions. All scholars were highly curious about the projector and its mechanism. Boys were often as interested in the machine as in the pictures on the screen, perhaps more so. There was much competition for the privilege of helping to fix up, take down, and pack the apparatus. When time permitted, these small groups of scholars were often shown how the machine worked. It must be confessed that its real principles were immediately far more clear to the boys than to the demonstrator. This kindness to youthful assistants was far from being disinterested. At such times the boys and girls talked very freely and unconsciously about the experiments, both amongst themselves and to the experimenter. From the oral lessons it seemed that the films awakened a real interest in the subject, from discussions of all kinds, that the film made the past actual to the child to a degree not achieved by the oral lesson. How could this impression be put to the test? We were trying to test the intangible. It seemed that these things were largely insusceptible to written test and best apprehended by personal contact with the children, by discussion, by continued observation of the class after the lessons. It was from these things that the teachers in the semi-formal tests had chiefly judged.

¹ *Supra*, 40.

² Cf. *The Cinema in Education*, S. T. J. Philpott, pp. 70-5.

118. Time not the Crucial Factor in deciding the Value of an Educational Method. Further, in following the method of equated groups and of tests after the film without intervening discussion lessons, it was possible that the question of time was given undue importance. Time is a vital consideration in judging educational procedure, and not least so with regard to History lessons, since it is rare that more than two periods a week are allotted to History in the Elementary School, or even in the Secondary School except in the upper classes. But in estimating the value of a method its economy of time should not be ranked as the crucial factor. A new method when put to the test may prove worthless. Otherwise, with reference to the time involved, four kinds of results are possible. The suggested plan will merit adoption if it produces equally good results in less time than the old, or improved results in the same time. It is to some degree valuable as a variant if it merely accomplishes as much as former methods in the same time. Both teachers and scholars are stimulated by a change in procedure. In such a case the acceptance of the new plan will depend on the expense involved and the extent of its demand on the energy and time of the teacher. In the fourth place, a new method may take longer than older ways to cover the same ground. Then, it must be decided whether time is being wasted or haste being made slowly. If the new, apparently slower method is making a contribution to the learning of the subject obtainable in no other way, and so bringing nearer the accomplishment of fundamental aims, it is worth the time entailed. The film needed to be tried from this last point of view as well as under strict time conditions.

119. Adoption of the System of Informal Tests. Consequently the system of comparative groups and special reliance on written tests was abandoned. It was decided to give more time to oral lessons with the classes who had seen the films. To quote these as evidence either for or against the film, the opinion of very many teachers was necessary. Actually work has been done in 52 schools, in the majority of cases several classes of varying ages having been tested in each school. 143 teachers of History and head teachers have participated in the experiments and given their views, apart from many other teachers who have watched the film-showings and lessons, and formed judgments on a general impression without more particular study of results from one class. The experiments have been tried with representative schools of different grades in several parts of the country and with varying types of children. It was desirable to consult as many teachers as possible on the type of film desirable in school, and on the practical questions involved. It might be that the practical difficulties in the way of introducing the film into schools were so great as to be prohibitive. All these considerations were responsible for the second type of informal tests.

120. General Procedure in Informal Tests. This was the general procedure. A list of films was sent to a school together with an invitation

to assist in the experiment. The response of the schools was most cordial throughout the year. The investigator then visited the schools to discuss the practical arrangements for the test and to plan the rest of the experiment. A class was chosen which was studying the subject of the film as part of their year's syllabus. The teachers decided at what point in the particular unit of instruction the film should be used. The film lessons were planned in close collaboration with the teachers concerned, so that from the joint play of many minds on the matter, there was less danger of overlooking possible avenues of approach to the solution of the problem, or of ignoring important aspects of the question. After the film-showing a discussion lesson followed, taken either by the teacher or the investigator. Frequently we shared the questioning. When one part of the lesson was definitely set aside for the children to ask questions on the films, I received and replied to the queries. The teachers, naturally, did not know the films so well as myself, and children notice and are curious about all kinds of detail. Throughout the enquiry, the teachers who took any part of the lessons were given a full synopsis of the film some time before the experiment. Notes were taken of the lessons, the points specially worthy of observation having been decided by discussion beforehand. The lessons were viewed as a method of discovering what the children gained from the film both in information and in other ways. For instance, the share taken by usually dull and backward children was noted, and the effect of the film in stimulating interest, creating a real desire to know more about its subject matter. The lessons were also regarded as a means of helping the children to organise the knowledge gained, and of discovering how film material could best be related to information acquired from other sources.

121. Written Exercises in Informal Tests. Written tests of all kinds continued to be given, usually on the day after the film-showing, but their incapacity of themselves to reach to the heart of the problem was recognised. The exercises varied considerably according to the film, the age of the children, the teachers' predilections, and so on. For the reasons given above,¹ free essays were preferred unless special circumstances suggested otherwise. The written work was generally partially planned before the film was shown, but an unexpected type of response in the oral lessons frequently led to departure from the original project for the better testing of some emergent aspect. The delayed tests were of the type originally devised, while the exercises were read by the teachers and investigator in the way already described for Experiments 5 to 17.²

122. Children's Opinions of Films and Film Lessons. No hesitation was felt in asking the children for written opinions on the value of the film as a help in learning History and for criticisms of the particular films seen. The children's attitude proved unexpectedly balanced. They had decided views on both the advantages and disadvantages of the film

¹ *Supra*, 41.

² *Supra*, 98.

method. They usually enjoyed the films, but they were too accustomed to visiting the picture theatres to be overwhelmed at the idea of films in school. Their power of separating what they felt to be the special contribution of the film from elements common to most interesting History lessons was surprising. So was their clear persuasion that this way of learning, though attractive, must not supersede, but merely supplement oral teaching. They were quite aware of the difference between enjoying the film, and being helped to learn History by it. Not that the two things are mutually exclusive; rather is the contrary likely to be the case. Their unconscious criticism of the films, expressions of bewilderment as to the meaning of certain incidents and the like, showed the kind of mistakes to be avoided in future film making. Their conscious criticisms lacked nothing in frankness. They were often more unsparing than those of their teachers. The children's opinions are a contribution to the solution of the problem by no means to be despised.

123. The Schools' Reports. Each school furnished a report on the experiments it had undertaken. Criticisms were asked on—

- (1) The children's response in oral lessons, with reference to such points as the amount observed, the stimulation of interest, the participation of backward children.
- (2) The written exercises—how these compared with usual work in length and quality, etc., whether the children retained or varied from their usual grade, whether the essential facts of the film were gripped and retained.
- (3) The value of the experiment to the class, and the teacher's opinion of the possibility of combining film lessons with his usual methods.
- (4) The projection: clarity, speed, noise, etc.
- (5) The film shown.
- (6) The kind of film likely to be most helpful in the type of school concerned, as regards subject matter, form, and length.
- (7) The practical aspects of introducing the cinema into school.
- (8) Any other points.

124. Conclusions are based on these Reports. It will be seen that this enquiry has been a highly co-operative undertaking. It has been possible to carry it through only because of the cordial assistance of very many teachers. Each experiment gave the teachers concerned a considerable amount of work. The consideration of the written exercises alone was no light task. It could not be hurried through, involving, as it did, not merely the giving of a mark, but the discernment of the differences between film and non-film essays. Finally, the conclusions reached in the investigation rest chiefly upon the reports on the informal tests received from the schools. The final report reflects the opinion of well over one hundred teachers. The initial attitude of the majority of teachers to the use of the film in school was extremely critical, their view of the

value of mechanical aids in education suspicious. Their final decisions were by no means lightly made. They are based on critical, reflective examination of oral and written results with the teachers' own classes, that is, with children whose temperaments and needs they well knew. I submit that, taking into account the difficulty of subjecting to objective measurement the imponderables with which we are concerned in this experiment, *e.g.* imagination, thought, interest, these carefully considered judgments of experienced teachers are a more valuable guide to future policy than the statistical results of purely formal experiments.¹

II. INFORMAL TESTS IN THE AVERAGE ELEMENTARY TOWN SCHOOL

125. Reason for Detailed Account of Experiments. It has been decided, at some risk of tediousness, to describe each experiment undertaken, since it is the cumulative effect of the recurring good results from all kinds of children and schools, of the favourable opinion of many teachers with widely differing views of the aims and methods of History teaching, that brings conviction of the helpfulness of the film. The points emerging from each experiment are indicated, a full discussion of the implications of the combined results of all the experiments being reserved till Chapters IX., XII., and XIII.

126. Arrangement of Chapter. This chapter deals with such tests in the average elementary town school, that is, in schools where most of the pupils are the children of artisans. The experiments are arranged according to the films used, and, within this grouping, according to whether the film was shown after preliminary lessons on the subject, or as an introduction to a topic.

127. Experiment 18. (a) THE LESSON. In Experiments 18 to 22 the Roman Britain film was used. A detailed account is given of the first of these experiments. The children's close observation of the film in this case, their zest in discussion, a sign of the intellectual activity and interest aroused by the film, are typical of the results in most of the other experiments, which are described with somewhat less particularity. The class concerned was an intelligent group of 46 girls aged 11 years, Class VA. in a Senior Girls' School on the outskirts of London. Before seeing the film the class had two oral lessons, one on Roman Britain, and two lessons for private study before writing their first essays on "Britain before the Romans came" and on "The Romans in Britain." They prepared these essays from *Piers Plowman*, Book IV. Chapter IV., and from Marten and Carter, Book I. Chapters 14, 15, and 16. These essays provided a standard of comparison for those written on the same topics after the girls had seen the film. All three reels of the film were shown to the children, with occasional comments on points not mentioned in the sub-titles, and with one or two stops for examination of detail,

¹ Cf. *supra*, 6. Review of Eastman Experiment.

such as the equipment of the Roman soldier. A lively discussion lesson followed the film. The class teacher took the first half of the lesson, of which an outline account follows :—

Question. Who enjoyed the film ?

Answer. All hands raised with much eagerness.

Question. Which parts did you like ?

Answer. The majority of girls either said they liked *part one*, or gave some incident from this reel. They were obviously interested in seeing the Britons engaged in the occupations of which they had heard in class. Of the rest, more preferred *part two* than *part three*. Girls are often more interested in home life than in battle scenes.

Question. What parts of the film cleared up things for you that you had not properly understood in your lessons ?

- Answers.*
1. I didn't know the Britons could make such good baskets.
 2. I didn't know they made nice pottery.
 3. I didn't remember they had orders from the Emperor at Rome.
 4. When the Romans made a shield wall and when they lifted their shields above their head.
 5. I didn't know the Romans left a soldier who fell on the march.
 6. I didn't know the Roman army was so strong.
 7. I didn't think the British women kept their hair so tidy.
 8. I didn't know about the Roman armour.
 9. I didn't think the Roman soldiers wore trousers.
 10. I didn't know about using the torch as a signal.
 11. I didn't know that the Britons could drive horses so well.
 12. I didn't know that a British Queen crowned herself.

It will be seen that many of these answers provided pegs for interesting discussion, as, for instance, the commentary on Roman discipline provided by the mention of the fallen soldier.

Question. Did you miss anything in the film that we have talked about ?

- Answers.*
1. We didn't see the Britons' boats.
 2. We didn't see them mining for tin.

Question. Did you like it as much as a Picture Palace film ?

Answer. Several girls raised their hands.

Question. Did anybody like it better than a Picture Palace film ?

Answer. All the girls put up their hands.

Question. Why did you like it better ?

- Answers.*
1. Because I knew something about it and didn't know how to picture it.
 2. Because it happened so long ago.
 3. Because it was more interesting.
 4. Because it was not an American film.
 5. The ordinary pictures are all alike. There is so much about love in them.
 6. It is more interesting because it tells us about their dress.
 7. It is more lifelike. It really happened.
 8. I liked the parts where the film was stopped. I could take it in.
 9. I liked it because it was true.

10. It was not so quick as ordinary pictures.
11. At the Picture Palace we don't hear about old-fashioned things.
12. I was a bit prepared for what was coming and so I was interested.
13. It was more picturesque.
14. Because we had some explanations while the film was on.

The teacher further discussed this point in a later lesson and came to the conclusion that these little girls were quite sincere in their expressed preference for this film over those of the picture-house type. She felt the answer would have been reversed with the older girls in the school, who like, she finds, the sentimental film. Is this an indication of the value of the film in school as an antidote to corruption of taste ?

Question. How many think films would help them to learn their History ?

Answer. All hands raised.

Question. The Headmistress then put this question :—

“ I wonder which part of this film you will remember best.

What would you say to finish the sentence—

‘ I shall never forget—— ’ ? ”

- Answers.*
1. I shall never forget the cruelty of the Romans to the slaves.
 2. I shall never forget the Roman dress.
 3. How the Britons made pottery.
 4. The way the Druids worshipped.
 5. The Roman habits.

Question. What particular habits do you mean ?

Answer. Making a tortoise with their shields over their heads.

6. How the Britons hunted the wild boar with a spear.

7. The way the rather savage people danced round the altar.

Question. In which way would you rather have a lesson ? Do you like a lesson from your teacher, reading your books, or a film best ?

Answer (from all). The film.

Question. Would you have understood the film if you had not had lessons on it ?

Answer. The general opinion was that they would partly have understood the film without preparation, but not so well as after lessons.

Question. Which part was the easiest to understand by itself ?

Answer (from all). Part I.

Teacher. Now we are going to see how much you remember of the film.

The teacher went through the points of the film step by step, asking the children questions. The Headmistress and teacher thought the children had observed the film minutely. The girls were as anxious to answer as they had been to take part in the above general discussion. The teacher afterwards remarked on the improved response from the backward children, a response which was continuing some weeks later. Writing of the lesson, she says : “ The film has been of great value to the children because, for the first time, it made the Romans real people to them and not merely characters in a History book. No vivid word picture, or even a wealth of illustrations, could have made these people ‘ come alive ’ as the film did. The novelty of this type of lesson certainly made a very definite appeal to the more backward children. It was particularly

marked in the case of one child who was rather bored with History before, but since has shown great keenness."

At the close of the lesson, the children were asked if there were any points in the film about which they wished to enquire. Several questions were asked. Naturally these queries often concern minor matters, since the teacher had already brought forward for discussion all the important points. The questions, coming at the end of 45 minutes' talk, are sufficient to indicate that the film had aroused the curiosity of the children. Again, it will be seen that they provided starting-points for discussion, arising from the interest of the child.

Children's Questions

1. Were the Romans friendly with the Britons? This question was an unconscious criticism of the film. As it appeared in the ensuing discussion, the child had heard that in the Roman towns in south-east Britain, Romans and Britons lived on friendly terms, yet in the film, whenever Britons are shown in the Roman town, they are roughly treated by the Romans, taken into custody by Roman soldiers for mimicking a Roman dandy, whipped as they carry burdens through the market-place or toil at the great wheel.
2. What were the women and children in, when they were encouraging the Roman soldiers? This question also arises from a defect in the film. The carts in which the women stand are not clearly shown. Most children gather from the screen that the watchers stood behind a fence or barricade.
3. When the Romans fought the Britons, how was it that those who were wounded were mostly women? This query again is a warning against over-confidence in the clarity of impressions left by the film.
4. When the Romans were marching along, were there Britons behind carrying their standards? This question contains a similar warning and an indication of the necessity of discussion after a film-showing. This child could not reconcile the skin covering of the standard-bearer with Roman nationality.
5. Did the standard-bearer have a special kind of skin round his body?
6. Were the soldiers' helmets lined?
7. Were the pillars outside the Chief's house made of clay?
8. What was the name of the animal the Britons hunted?
9. Why did the Britons make smoke come out of their altars?
10. How could the men in the watch-towers see the enemy at night?
11. What was the message signalled?
12. What was the name of the thing in which the Romans were carried? (the litter).
13. When the Romans were in Italy, did the soldiers act as police there too?
14. When the Romans acted as police, what did they have over their ears? (They are shown fastening their cheek guards as they fall in.)
15. Did the Romans always have couches to lie on at meals?
16. In the third part, why did the Britons open the gate to the Romans?
17. When the Druid climbed the altar, was he carrying mistletoe?
18. Were the British warriors all at the back and sides when the chariots charged?

19. Was the statue of the Emperor in the Basilica that of the first Emperor of Rome ?
20. When the messenger came to the Governor, he wasn't wearing a toga, was he ? (In Reel II. a messenger comes to the Governor when he is receiving guests for a dinner party, and wears the tunic only.)
21. When the Britons danced round the altar instead of praying, did they do it for a special purpose, or was it a habit ?

(b) WRITTEN WORK. A comparison of the essays written before and after seeing the film no less showed its value. The teacher's criticism ran : " The essays were fuller than usual. The details were well remembered by all children, even the dullest. The style was more free and far less stilted, as though they were writing of something within the range of their experience."

Commenting on the whole experiment, the Headmistress said that to her the value of the historical film for children lay in its power of touching their thought on historical matters with emotion ; only if this happened did the past live for them.

128. **Experiment 19.** The same film was seen by a class of 53 boys aged about 11, from the corresponding Boys' School. The teacher's handling of the film material in the subsequent follow-up lesson was interesting. It illustrated what appears to be one of the chief advantages in using films, the presentation of a body of material in a comparatively short time, to be used as the basis of discussion and critical work. The lesson also brought out one aspect of this film to be commended, the contrast it affords between British and Roman civilisations and modes of life, as well as the contrast between the two armies. Various parts of the film were chosen by the teacher to illustrate these contrasts, which he brought home to the boys by means of leading questions on what they had seen on the film. For instance, there was an animated discussion of the difference between the Britons' worship in the woods and that of the Romans in their splendid temple of Victory, a contrast culminating in the discovery that " There weren't any Christians in the film at all." In the same way, the contrast between the two armies was discussed. In spite of the staging of the battle scene, very unconvincing to adult eyes, children realised remarkably well from the film what Roman training and discipline meant, as this dialogue shows :—

Teacher. Tell me any way in which the Romans defended themselves.

Answer. By making a shield wall.

Teacher. What other General ordered his men to lock their shields ?

Answer. Harold at Hastings.

Teacher. Would the trick of the Normans have succeeded against the Romans ?

Answer. Chorus of—" No."

Teacher. Why not ?

Answer. 1. The Romans wouldn't have broken their ranks.

2. The Romans were disciplined.

The information and interest of the boys was tested by putting them to ask questions of each other, the boy who asked the question judging of the fitness of the reply. All the 53 were eager to question. These are such of the boys' questions as it was possible to copy down and the answers accepted, in the order given :—

Question. Why did the British women unplait their hair ?

Answer. To show mourning.

Question. What were the Britons best at making ?

Answer. Pots and baskets.

Question. What did the Romans have before dinner ?

Answer. A bath and a massage.

Here the teacher intervened.

Teacher. What other famous nation took pride in keeping themselves clean ?

Answer. The Greeks.

Teacher. Where do we find remains of the Roman baths ?

Answer. At Bath.

The boys then continued their questioning.

Question. How did the Romans get the bridge up ?

Answer. The slaves turned the wheel.

The teacher asked who had seen a windlass at work. When several replied, he asked how those seen differed from the one on the film.

Answer. 1. They are smaller.

2. They are not made of wood.

Other boys' questions were :—

1. What was the British signal for war ?

2. Why did they meet in the forest ?

3. What two ways had the Britons of getting food ?

4. On which side did the Roman wear his sword ?

5. How could you tell a Roman soldier from an officer ?

6. What was the Roman spear called ?

7. How did the Romans greet one another ?

Here the teacher asked what people used that greeting to-day. On receiving no correct suggestion, he briefly mentioned the Fascisti and asked, " Why do the Fascisti use this salute ? "

Answers. 1. They are accustomed to it.

2. Because they are descended from the Romans.

It will be seen that the boys' questions were drawn from all parts of the film.

The boys were then asked if they wished to ask any questions to which they did not know the answers. They wished to know :—

1. Did the Romans always wear long trousers, because they aren't shown wearing them in the pictures in books ?

2. Why was the litter stopped ?

3. Why was the dandy attacked ?
4. What did S.P.Q.R. mean ?
5. Where were the prisoners put ?
6. Why did the Romans carry their kit on poles ?
7. Why were their legs unarmed ?
8. What happened to the soldier who fell out ?
9. Why were these weak ones left ?
10. Would the Britons attack deserted soldiers ?

All except three of the class liked "the fighting" best. One liked the scenes connected with the illness and death of the chief, one the views of the bridge, the third the making of pottery.

The teacher considered that the film had unquestionably provided a stimulus, and that the oral response was excellent, even when due allowance was made for novelty. He concludes his report by saying : "History has a double function : it tells a story and it explains. It seems certain that cinematography can help in the telling. Whether it can help in the explanation I do not know." The Headmaster judged the two sets of essays written before and after the film, and considered that these brought out the value of the film as a supplement to oral teaching and reading. In the preliminary essay, the boys emphasised the semi-savage state of the Britons and their social advance under the Romans, and noted the events of the conquest and occupation, with the names of prominent men, exactly what one would expect from the usual lessons and text-book. In the second essay, details were added from the film, and the "atmosphere" caught. Moreover, "so far as fluency and quantity of matter were concerned, all the boys did better than usual, owing to the wealth of material on which they could draw."

129. Experiment 20. The last two reels of the Roman Britain film were shown to children of $10\frac{1}{2}$ years old, in a semi-rural school in the North. They had had lessons on the Romans in Britain a month previously. The children enjoyed the film and freely expressed their opinion that they had acquired many new ideas. "I thought the Britons had proper swords, not scythes, sickles, and anything they could pick up." "I did not think the women and children would come, but stay in their homes." "The film taught me that most of the Romans were foot soldiers." "I thought the Britons would all set off together in marching order, but they seemed to go anyhow." "I thought the Britons and Romans would be all mixed up in the battle, but the Romans kept in a close straight line." The children were asked the next day to write down what they remembered of the film. Evidently the reel on the armies made the most impression. All the children give good accounts of this reel, mostly beginning with a mention of the standard and proceeding in the order of the film through the more important episodes. They do no more than glance at the incidents in the second reel, most of them being very interested in the drawbridge, its watch-towers for signalling, and the wheel, and in little beside. From this instance and others, it appears that

children find it more difficult to remember detached scenes than a film produced in narrative form; the scenes in Reel II. are particularly unrelated and fugitive. Naturally, seven months later, in the delayed test, it is again the reel on the army which is the better remembered. The teacher thought that the facts remembered were those which appealed most strongly to the individual, without any idea of importance, the banner and its decorations to those interested in artistic detail, the fighting and chariots to most of the boys and to girls of adventurous spirit. The points most commonly remembered were the banner, the Romans on the march, the signalling from the watch-tower, and the armour of the Roman soldier. The signalling would tend to be remembered from its spectacular nature. It is significant that attention was drawn to all the other points by oral comment when the film was shown, the film being stopped for examination of the Roman soldiers' equipment. This is one of the many cases where children have been found to remember best what was talked about while the film was being shown. The teacher thought that the results compared well with those of other tests. The bright and average children had reached their usual standard; the backward children had improved. Of the 4 children graded D, 2 had reached the C, and 2 the B standard.

130. Experiment 21. This film was shown in two schools of a different type, that is, in two Central Schools, but it is convenient to describe these experiments here. The first was in a mixed school, and the film was shown to the first-year class, 41 pupils aged 11 to 12. Four months earlier the class had had a series of lessons on Roman Britain. In the follow-up lesson the children were first given the opportunity to ask questions on the film. Their queries were: "Where did the Britons get their gold and silver?" "Were the handles of the fans made of gold and silver?" "Why did the Romans leave one man behind?" "Who were the men signalling to in the tower?" "What shape were the swords of the Romans?" "When the British chariots were parading, why did not the Romans attack?" "When the Romans made a shield wall, why did not the Britons attack the wings?" Then the teacher took a straightforward question and answer lesson on the subject matter of the film. Commenting on the lesson, she says: "The response of the children was good in class, but dull children remained dull. I found this also in their written work. The film aroused interest. Several very intelligent questions were asked, but the lesson was given in rather unusual circumstances (with two visitors in the room). Normally I think there would have been more discussion." Three questions were set the class:—

1. Would you have preferred to live in a British village or a Roman town? Give your reasons.
2. Describe the British and the Roman armies and say why you think the Britons were defeated.
3. Do you think you could learn History more easily if you could see historical films? Give your reasons. Have you any criticisms?

The teacher tabulates her criticisms :—

1. The best papers were written by the children who usually do the best work.
2. Many used the present tense when writing. I think this may be one drawback in the showing of History films.
3. Some children thought the city was Rome, others that there was only one British village and one Roman town in Britain.
4. Some were under the impression that Britain was won in one battle.
5. Some thought that the Romans outnumbered the Britons.
6. One or two children merely repeated the answers given in the follow-up lesson.
7. I feel that the class as a whole after seeing the film has a much better idea of a Roman army but not of a Roman town.

The second criticism has not been found of universal application during the enquiry. The fifth and seventh reflect weaknesses in the film itself. It is unlikely that so small a force of Britons as is shown on the film would have attacked a Roman army, and the representation of Romano-British life is inadequate. Of the children's opinion of the helpfulness of the film she writes : " With one dissentient the class decided that the showing of History films would make the learning of History easier. Many said that it was much easier to see a film than to picture it from a description. As a result of seeing the film they understood how Romans and Britons dressed in war and peace much better than before." The children gave many criticisms, which are dealt with later.¹ Summing up her impressions of the experiment, the teacher writes : " The film appeals to the visual memory only, and for those children whose visual memory is weak the teaching of History by the film would not be a good method. . . . I think the film will be very useful in the teaching of History, but it will not be a substitute for present methods. It will be very useful in giving social background and in lessons on the history of arts and crafts."

131. **Experiment 22.** In the last case, the film was used with a class that had had much less preparation. They were again the first year of a London Central School, 41 boys whose average age was 12 years 2 months. They would have learned earlier of the Romans, but in this school had only had two lessons on " Prehistoric Britain " which bore at all on the subject matter of the film. Few questions were set. The answers were, of course, discussed. Here is merely given a summary of replies to indicate how the film is likely to be a useful supplement to usual lessons.

Question. What did you learn from the film that you did not know before ?

- Answers.*
1. That the Romans had such good horses.
 2. That the Romans made a wall of shields.
 3. That the Romans wore frock affairs and trousers.
 4. The tactics the Romans used in battle.
 5. That the Romans carried their kit on sticks.

¹ The value of the film is discussed at length, *infra*, 356 *et seq.*

6. That the Druids stood on the altars to pray.
7. That the Romans could make big statues.
8. That the Britons tried to frighten the Romans with cavalry.
9. That the Britons fenced the villages.
10. That the drawbridge was raised with a wheel
11. That the Britons were so civilised. (The class as a whole was surprised at this.)
12. That signals were made with torches.
13. That the torch was a sign of war.
14. That women undid their plaits for mourning.
15. That the Britons' huts were so high.
16. That the Romans made a wall round their camps every night.
17. That the Romans came for corn. I thought they came for tin.
18. That the Chiefs of the Britons crowned themselves.
19. That Britain paid tribute to Rome.
20. That two people drank from one cup.
21. That women and children watched the battle.
22. That Roman soldiers acted as policemen.
23. That the Romans were so cruel as they are in the picture.
24. That the Britons had such good clothes.
25. That the Romans used to lie down for meals.
26. That the Britons worshipped spirits in the trees.
27. That the Britons could drive so quickly.
28. That the Romans enjoyed themselves so much when they were not fighting.
29. That they worshipped by dancing round their altars.
30. That the Britons were such skilful potters.

Question. What did you expect to see in the film that was not there ?

- Answers.*
1. The landing of Julius Caesar.
 2. The Britons wearing skins.
 3. The Britons painted.
 4. The Britons building Stonehenge.
 5. The Britons living in caves.
 6. Much fiercer Britons.
 7. The Druids encouraging the Britons in war.
 8. Coracles.
 9. I thought the Romans helped each other, but they left a man behind.
 10. I would have liked to see Hadrian's Wall.

Question. Did the film give you a better idea of the Romans in Britain than you had before ?

Answer. All said " Yes " except one boy.

Question. Why didn't you like it ?

Answer. I don't think the film was very clear. The roads weren't much like roads, and that's what we remember the Romans making.

The teacher pointed out that they were shown the early days of Roman rule on the film.

Question. Has anybody else any criticisms ?

- Answers.*
1. The British army was too small.
 2. Did the Romans wear sandals ?

3. I thought the standard was an eagle.
4. Weren't the helmets a bit modern ?
5. Weren't the statues too good for those days ?
6. Where was the smoke coming from on the Druids' altar ?
Wouldn't the priest be smothered in smoke ?

Question. Which part did you like best ?

Answer. The great majority liked the last reel, on the armies, best.

Question. Are there any questions you want to ask about the film ?

- Answers.*
1. What was the name of the bugler's horn ? (the bucina).
 2. How did they build up the camp wall ?
 3. Where was the Queen's chariot going ?
 4. Why did the chariot go alone ?
 5. Did they always fight in the open ?
 6. In the books it says the Romans burned down the Britons' corn.
On the film it says they wanted Britain for the corn.
 7. Why did the Romans stand so long before attacking ?
 8. What was the name of the animal hunted ?
 9. Who was the man in the litter ?
 10. Where were the shops in the forum ?
 11. How could they keep their shields together when they put them
above their heads ?
 12. Wasn't it silly to wave torches during a secret rising in the forest ?
 13. Would the Romans be able to digest their food properly when
they ate lying down ?
 14. Where was the food on the Roman march ?
 15. Did the Romans station scouts when they rested on the march ?
 16. The Britons' way of fighting seemed funny. The second line
waited. If they had attacked in a more solid body they would
have had a better chance.

Question. How many would like to see some more History films ?

Answer. All the class.

Question. Would you think the Romans were here a long, or a short time ?

Answer. (General) A long time.

Question. Who knows how long ?

- Answers.*
1. 400 years.
 2. The film didn't show the Romans improving the country.
 3. You could tell the Romans hadn't been here long because the
Britons hadn't got used to them.

The teacher remarks on the lesson : " The response to the questions was very good, but this is generally so with this class." The teacher invited any boy who would care to do so to write an account and criticism of what he had seen. Nearly every boy in the class responded. " I purposely made it quite voluntary and gave them no indication of what I would really like, so that the opinions are quite genuine. It will be noticed that the boys are almost unanimous in approval." The teacher concludes : " Judging from this experiment and its results, I should say that films could be a valuable adjunct to the teaching of History to children up to, say, 14+, " and adds : " The duller boys seemed to respond to the stimulus of the films much more than the more intelligent."

In this type of school, then, all the experiments with the Roman Britain film left the teachers feeling that the film could be a useful supplement to oral teaching.

132. Experiment 23. It is convenient to consider here the only other experiment taken in the Junior Forms of a Central School. This again was the first-year class, 42 boys aged 11+. The films, "People of the Axe" and "People of the Lake," were shown to the boys. The class had studied the period fairly fully, using *Our Heritage* (Marten and Carter) for text-book and having *The Stone, Bronze, and Early Iron Age* (Quennell) in the class library. The follow-up lesson was animated. The teacher asked leading questions on the salient features of the first film, and then remarked, "Now tell me anything else of interest you noticed." There was such a forest of hands raised and manifest wish to answer that he was obliged to remark, "Well, I'm glad to see you so eager to answer, but don't eat me." The boys here specially remarked that farming was begun, the people had sheep, and that even weaving was shown. They had noticed pottery-making, Fleet getting shell-fish, and the ravenous way of eating. For the second film, one boy was set to tell the story. He proceeded at a great rate, the others being very interested to listen and criticise: "He missed something there, sir." "Please, sir, he forgot that they defended the stockade." All the omissions were supplied at the end of the account. Interesting questions were raised by the boys during the discussion: "Did the people do the things they were doing because they wanted, or did the Chief tell people off to do particular things?" This gave the teacher a starting-point for a discussion on the degree of organisation already achieved in the Bronze Age, co-operation and leadership being implied in the building of the artificial islands, the construction of such a place as Stonehenge. Points of contrast shown on the films between the two ages were asked for; the boys supplied improvement in weapons, dress, defence, defence of the village, a permanent site for homes, greater personal neatness. Asked which film they preferred, all but two gave the Bronze Age film as being more exciting and affording a strong contrast between present customs and those of the Bronze Age. Of the two exceptions, one could only vouchsafe that the Stone Age film was "easier to get hold of." The other thought that this was the case because there was one central figure, whose actions were typical of the age portrayed—"He could be followed all through." This was a boy of medium ability, sensible, but not volatile.

The teacher reported: "The attention throughout was very keen. The discussion showed careful observation and progress in the assimilation of new ideas that resulted in interesting and informative talks in subsequent lessons. The boys preferred the film featuring the Boy Scout. But details, like the use of the scapula for a shovel (not too noticeable in the film), were noticed. Collectively, I am confident that nothing was missed, and many original deductions were made by the boys irrespective of their relative positions in class: the backward boys responded equally

readily, and difficulties in expressing thought in composition form perhaps qualified the value of their written work. Their oral answers were much better than their written work shows."

The written work was done after the lapse of a month. Paper 1, given below, represents the best group, Paper 2 the worst, amongst these boys.

Paper 1

1. Give your opinion of the film as an aid to the teaching of history.

Answer.—A film is a big help in the teaching of history. For one thing it illustrates every action. In books there are illustrations, but they only portray a scene or action in a certain place. A film shows everything moving about naturally. There is only one thing that is better than films for the learning of history, that is seeing what actually happened itself. As this is impossible and one can only see the relics which remain, the film in my opinion is the best aid for the learning of history. For instance, the films we saw of the Bronze Age and Stone Age were wonderful films, and nobody unless they saw films of their equal would properly realise what life was like in those days.

2. Which film did you prefer? What part of that film do you remember?

Answer.—I preferred the film of the Bronze Age. There was more excitement in it. The part I liked best was the part where the men of one tribe came and raided the men of the other tribe. I remember plainly the skill of the scout when the men were chasing him when he dodged in the hut and the men ran past and then he ran the other way.

3. What new knowledge did you learn?

Answer.—I learned a lot by the showing of the films. I never knew that the Stone Age men came across the Channel in boats made of trunks of trees. I did not know they did any mining. In the Bronze Age film I learnt that the men of that age lived in lake villages surrounded by water. I never knew the people of that age lived in such well-made huts. Before I saw the film I never knew the Bronze Age men fought with axes so much like our modern ones.

4. Write a brief account of life in the Stone Age.

Answer.—Life in the Stone Age was almost like that of an animal or very little better. They had no weapons to fight with other than rudely made out of stone and wood and sinews of animals. There was an almost daily routine of hunting, eating, trading, and mining. Occasionally a traveller would come and barter flint and stone axe, arrow, and spear-heads for skins. At the arrival of one of the travelling traders there was great excitement in the camp.

5. Write a short account of life in the Bronze Age.

Answer.—Life in the Bronze Age was rather more advanced than life in the Stone Age. They lived in tribes and were very warlike. They were always quarrelling with the warriors of other tribes. In peace time they hunted and fished and forged bronze helmets, bronze spears, bronze shields, and bronze arrow-heads. They wove cloth with roughly made handlooms. They did a lot of fishing, because most of the tribes lived in the lake villages.

6. What difference did you notice between the people of the Stone Age and those of the Bronze Age?

Answer.—The people of the Stone Age used flat fronted-boats and in the Bronze Age they used pointed boats very much like the modern canoe. In the Stone Age people wore skins of animals, and in the Bronze Age they made cloth

and wore it. In the Stone Age the people lived in badly made huts because they kept travelling about. In the Bronze Age they made better huts because they stayed more in one place, and in the lake villages. They cooked better than what they did in the Stone Age. In nearly every village there was a man who made steel or bronze weapons and tools. They strongly barricaded their villages against intruders with rough-made planks of wood and bars of iron, where in the Stone Age the men just made barriers of logs of wood and branches of trees which, with a little force, could be broken down.

Paper 2

1. Give your opinion of the film as an aid to the teaching of history.

Answer.—The film would be a great aid as it shows the real thing. Also most boys like films of this sort. It would be very nice if a different film were to be shown every week. They teach history better than most history books as they are more real. It would be rather nice to have a different set for each year. The films we saw were very good. Also they make the time pass away.

2. Which film did you prefer?

What parts of that film did you remember?

Answer.—The film I preferred was the one about the Bronze Age.

I remember how the scout fell asleep and a Bronze Age warrior came, and when this warrior fell down to worship the scout. Also I remember

(1) How he saw the village.

(2) How the hillmen attacked the place. (This was the best part.)

3. What new knowledge did you learn?

Answer.—That our modern axes are very similar to the Bronze Age people's.

That the Bronze Age people were better clothed than the Stone Age people.

That they made such good swords. (Here I mean the people of the Bronze Age.)

That they dug flints. (Stone Age people.)

That the Stone Age people kept sheep.

That the Bronze Age people were much more advanced than the Stone Age people.

That they had such good weapons.

4. Write a brief account of Life in the Stone Age.

Answer.—These people crossed the Channel in dugouts but they were not settled when they arrived. The villages were encircled by palisades which were made of wood. They kept small flocks of sheep which the young men looked after. To enter the village people had to bang the gate. They could weave cloth and used the shoulder-blade of the deer to dig with and an antler for a pickaxe. They were good hunters and they made good arrow-heads. These they tied on a nice sprig.

5. Write a brief account of Life in the Bronze Age.

Answer.—These people lived in Lake Dwellings. They knew how to use metal and were better dressed than the Stone Age people. The village was on poles and the dugouts were better. The things they made were much better and also the houses were better made. The warriors wore metal helmets very similar to the Vikings. They worshipped heathen gods and made fire such as Boy Scouts do to-day. The weapons they made were much better.

6. What difference did you notice between the people of the Stone Age and the people of the Bronze Age ?

Answer.—I noticed that the Bronze Age people were more advanced altogether than those of the Stone Age. Also the Bronze Age people were better looking and in my opinion the discovery of metal brought a great change. The people looked different altogether. Also the Bronze Age men were more settled as their villages had better fortifications. But in the Bronze Age some people were better than others.

Of these papers the teacher said : “ The work showed an advance upon the quality as written in other History lessons. The boys were more eager to write, and found difficulty in not having sufficient time to put down all they knew. They were introduced to new ideas, *e.g.* the need to select examples to illustrate new knowledge. As may be expected, there is some evidence of reading and previous knowledge. This is as it should be, for the film was shown when the boys had learned all that they possibly could from books and illustrations : the film came as a last impression, correcting and amplifying previous knowledge.”

Senior boys in this same school saw the League film.¹ The teacher came emphatically to the conclusion that he would welcome well-conceived films, for use chiefly to summarise and “ fix ” work already studied. This is the only school of the type under consideration where the films on primitive man were used, but the one case was successful.

133. Experiment 24. “ Wolfe and Montcalm ” was shown in three schools. In the first case the film was tried as an introduction to the subject. The films in use did not lend themselves very readily to this sort of test, since they deal with subjects, the Romans in Britain, Wolfe, Nelson, with which children make early acquaintance, at least in story form. The film, “ The World War and After,” proved the one most useful in this respect, but it was sometimes possible to use the other films where formal study of the subject was commencing. In estimating the success of the method in these cases, it must be remembered that the children had a certain amount of “ background ” at their command. In this case, where the Wolfe film was shown to a class of 31 boys whose average age was 12 years 6 months, the teacher’s handling of the film material seemed a singularly able demonstration of how a film might be fitted into the general scheme of work without undue loss of time or over-emphasis of the purely spectacular. Before the film-showing, a lesson had been given to the boys explaining the origin and objects of the Seven Years’ War. This lesson had finished with a notice of the capture of Louisburg. The boys had drawn maps showing the positions of the French and English settlers at the beginning of the war. The film was, as usual, shown with stops at the maps for their explanation. No other comment was made beyond an occasional explanation as to which forces, English or French, were at the moment operating. In this case the boys were asked at the beginning of the follow-up lesson if they wanted to ask any

¹ *Infra*, 302.

questions on the film. Their response left no doubt as to their close and intelligent observation of the film, nor, again, as to the value of the film in stimulating the intellectual curiosity of these boys. Naturally, they were chiefly interested in the eighteenth-century method of fighting, surprised at its contrast with modern warfare. "Was the line of battle really so thin?" "Weren't there any more men?" "Didn't they stand in squares?" "Why did they wait till the enemy were within forty paces?" To this the rest of the class with some scorn replied. "Were the muskets really like that?" "How did they get the cannon up the cliffs?" "Where did the shots come from which wounded the English while they were waiting, if the French were not within range?" "Had the English any Indian Allies?—Why not?" "Why was the dress of both armies the same?" "Wasn't it a funny sort of dress to fight in?" "Why did they wear wigs in battle?" "Did the English really march better than the French?" "Who was the Prime Minister then?" "How old was Wolfe? I thought he would have looked older." "What was the matter with Wolfe?" "Why did they land from small boats?" "Is it true on the film that only a few soldiers climbed the cliffs?" "Was there a moat round Quebec? I couldn't see one, but they had a drawbridge." "Why didn't the French hold Quebec after the battle?" "How is it that the navy is said to be so important, yet most of the fighting was on land?" The class answered this question and the next: "Why did the French retreat in the spring when only one ship had appeared?"

It will be seen that these questions, though more particularly concerned with the battle, cover nearly the whole of the film, and it is obvious that in the discussion centring round these questions many of the more important aspects of the campaign came to the fore. For instance, the question as to the relative smartness of the marching led to discussion on the personnel of each army, to contrast of the trained English soldiers with Canadian militia, to Montcalm's reasons for avoiding pitched battle. One last question is interesting as showing how closely the boys watch the film, and how they think about what they see. In the first map on the film, showing the disposition of territory in 1757, Florida is marked as belonging to Spain. In the last map, where a black sheet is drawn over the lands newly acquired by England from France, Florida also becomes black. The seeming discrepancy was noticed. "Why did Florida go black when it belonged to Spain?" a boy asked, and the terms of the peace treaty had to be looked up in the text-books. This discussion took 25 minutes. The teacher spent the last 20 minutes in putting this incident in its right perspective—in this way:—

Teacher. This incident you have seen on the film is just one part of a much bigger movement. What?

Boys. (1) The Conquest of Canada.
(2) Colonisation.

Teacher. Well, they were connected with a long-continued rivalry. What was that?

Boys. The rivalry of England and France.

Teacher. Yes, this incident was just a part of that rivalry. It is interesting to see the battle on the film because it is a story full of action, but it is not a thing you should think of as of the first importance. It is a purple patch. Now we have to think of various aspects of it. What war was it a part of ?

Boys. The Seven Years' War.

Teacher. Who was the big man in the war ?

Boys. Pitt.

Teacher. That is why he is shown at the beginning of the film. Where did he shine tremendously ?

Boys. As a war minister.

Teacher. Yes. Pitt took on the world-wide war at a time of English failure, and in a short space of time he led the country to victory. What was one big cause for his success brought out in the film ?

Boys. (1) His choice of commanders.

(2) Yes—he talked about the sword of men.

(3) He saw the importance of sea-power.

Teacher. Another point. There were three places of strategic importance on the St. Lawrence. What were they ?

Boys. (1) Montreal.

(2) Three Rivers.

(3) Quebec.

Teacher. Pitt saw that Quebec must be taken first. But the English could not sail straight up the St. Lawrence to it. Why ?

Boys. The French held Louisburg.

Teacher. What did I call Louisburg yesterday ?

Boys. The Gibraltar of the St. Lawrence.

Teacher. That's the point we reached yesterday. We took Louisburg. Then follows the film. Wolfe sailed up the St. Lawrence and took Quebec. It all depended on Wolfe. Now we have to consider why he is so important. Why did he attack from the West ?

Boys. It was a weak point.

Teacher. Why was it weak ?

Boys. The Governor-General relied on the steepness of the cliffs.

Teacher. Yes. You saw that sentry asleep against the tree. I don't suppose we actually know of any French sentry sleeping, but he was shown like that in the film to convey the fact of French unpreparedness. So Wolfe attacked here, at the Foulon, and by so doing showed himself a master of strategy. He did the unexpected thing. That's why we count him famous. Do you think Montcalm was a good General ?

Boys. Chorus of—"Yes."

Teacher. How was he hampered ?

Boys. Vaudreuil did not work with him.

Teacher. The French had a great general, Montcalm, in America. They had a great general, Dupleix, in India. They threw away their advantage from having these generals. That is the failure of the French all through. They frittered away their first empire by not leaving their generals a free hand. Montcalm was a very great general, like Wolfe, but he was not able to do just what he wanted. Now let's think about the battle. Was it like a modern battle ?

Boys. No. No trenches.

Teacher. Nowadays it is trench warfare. Men dig themselves in and fight folk they don't see. Then they stood upright for people to shoot at, at forty paces. But you saw what small numbers were engaged. This victory, important in the winning of Canada, is little more than a skirmish from the modern point of view. Did fighting go on through the winter ?

Boys. No.

Teacher. That is another difference. Nowadays we fight through. In the spring, you saw the French and English watching for a ship. What was the point ?

Boys. (1) They had to depend on the navy for supplies.

(2) They needed reinforcements.

Teacher. Which navy came first ?

Boys. The English.

Teacher. Yes, so the French fell back on Montreal and, since no help came, later gave in entirely. What was the result of Wolfe's work ?

Boys. Canada became British.

Teacher. That was not the end of the struggle, however, for the people living in Canada were still French. There were many troubles to be got over, that continued till the nineteenth century, before those people became contented under British rule. Those episodes we'll come upon later.

It seemed that boys of that age could scarcely have spent two History periods to more profit : one in absorbing facts—and the facts were well realised and provocative of thought, one in discussion, the lead in the first part of the discussion being left to the boys, in the second taken by the teacher, to ensure realisation of the broad aspects of the matter. Throughout the whole lesson, all the boys were eager to take part. It is impossible to feel that the use of the film leads to passivity and inertness on the part of the child, a criticism frequently levied against the use of the film in school, when many such animated lessons as this have been seen. The reverse is the case. Moreover, these boys have not only learned the story of the climb and of the battle, to which teachers of boys of this age do not usually devote more than one period, if so long, but have seen the one event against the background of the whole campaign and the longer rivalry of two nations. In addition, they have realised the difference in naval and military matters between then and now ; the whole story of eighteenth-century warfare has been illuminated. The teacher at this school after the lesson said that he felt the value of historical films to lie in this portrayal of incidental detail. Oral teaching can give the main facts, and any good History teacher can enthrall a class with a story like that of Wolfe. But the boys often think of these stories against highly improbable backgrounds, Raleigh spreading his cloak in a modern street, Alfred letting the cakes burn in a kitchen like their mothers'. These boys, for instance, had thought of eighteenth-century fighting more or less in terms of the trench warfare of the last war. The film corrects all this more quickly and more thoroughly than is possible by the use of

ordinary pictures, which, though admirable for illustration of dress and so on, are weak for the portrayal of action ; nothing could so well convey the method of the firing of " Captain Yorke's six-pounder " as the film.

Of the written test on " The Taking of Quebec," the teacher remarked that the boys' essays were more even in texture than usual, a trait noted in other sets of essays. The answers bring out all the main points of the film, but the teacher was disappointed that so many boys failed to mention the scene between Montcalm and Vaudreuil, where the weakness of the Foulon was discussed, since this is of importance as giving the key to after events. The omission is usual in the essays of boys of 12 to 13. It does not seem of great moment, since the children explain why the Foulon was chosen as the place of ascent ; it was not strongly guarded, the French relying on its natural inaccessibility. These children were aware of the incident, for in the oral lesson they readily answered questions on the dispute. They are merely not so interested in the French as in the English, in Montcalm as in Wolfe. When the story is told, as every English schoolboy seems to tell it, from the point of view of Wolfe's activities, incidents at French headquarters tend to miss mention. In the formal experiments the incident was omitted equally from the essays of the lesson as of the film group. It remains, however, a weakness that it is difficult for a film to emphasise one incident more than another except by giving important episodes at greater length. A teacher can indicate relative importance by one short phrase, by tone of voice. The solution seems obvious, in view of the observations made on the best method of using the film ; comment on the episode it is desired to emphasise as the film passes through, if the film is shown without preliminary lessons.

134. Experiment 25. In this case the Wolfe film was shown for revision purposes to children aged 12 to 13, in a semi-rural school in the North. The class had studied this period in Standard VI. in the previous year, and no other preparation was given before the film-showing. The class teacher, who took a discussion lesson with the children after the film, regretted this lack of a preliminary lesson. She felt that the children had enjoyed the film. They had been stirred to a feeling of pride in Wolfe's achievement. Many hazy ideas on the subject had been cleared away and a greater insight into the story gained than was possible to the children from reading. Much interesting matter and detail not found in the ordinary school text was gathered together in the film. Otherwise, such details could only be found by reading many different versions of the story, a procedure, I might point out, not easily practicable to a child of 12, both from the inaccessibility and difficulty of such sources. But the teacher felt that without a previous knowledge of the episode the film would not be of any great value in teaching historical fact to children of that age. Even with some previous knowledge they were not able to comprehend all they saw. The motion was too quick. The film was more likely to make a lasting impression if it followed soon after a preparatory talk. On the next day, the class made a summary of what they

remembered of the film. They gave a complete outline of the story, practically all mentioning the share of Pitt as organiser of victory, the importance of relief in the spring of 1760, as well as the exciting incidents of the ascent of the cliffs and of the battle. They, however, tell the story from the English point of view, omitting reference to French affairs except when the French and English are directly in contact, a point already discussed. The teacher's view of the advisability of a preliminary lesson is borne out by the results of the delayed test taken seven months later. The average children maintained their usual grade, in the severe circumstances of the test, after a long interval and with no revision, a proof of the strength of the impression left by the film. The core of the story is well remembered, the scaling of the cliffs, the battle, the deaths of the two commanders. Of these the children knew something from their oral lessons. The film has added detail to their picture of these things, but not for long impressed entirely new episodes. The omissions in the delayed test, coupled with the absence of reference to the hostility of Vaudreuil and Montcalm and to the activities of their troops in the earlier essays, suggest that the film is of more value to amplify and enliven partially known facts than to introduce fresh matter. At the same time, it is obvious that the twice told is likely to be remembered better than facts given only once, whatever the form of the second telling. The formal tests with this film with children of this age indicated that one showing of the film made as lasting an impression as one telling of the story. Again, in this experiment, the bright children fail to outdistance their class fellows to the usual extent. Of five children of A ability, only one maintains that grade. Two drop to B+, one to B, and one to C. On the other hand, the usually backward children improve. Of the two D children in the class, one retains her usual grade, the other rises to B-. One child rises from C to B, two others from B to B+.

135. Experiment 26. In the foregoing eight experiments, the films proved of value to children aged 10+ to 13+. In the ninth experiment, the teachers decided that the contrary was the case. 23 girls aged 13+, the First Class in a London Senior School where much time is given to individual work, saw the film when the teacher had given an oral lesson on the subject and the class had written an essay after further private study. A discussion lesson followed the film, which all the girls said they had enjoyed. They were chiefly impressed by the climb up the cliff and the march towards Quebec. One girl thought it was clever to show first the discussion and then the execution of Pitt's plans. Most of the other matters discussed in the lesson were treated over again in the written test set by the teacher, and will be noticed later. The girls asked few questions, and these mostly on trivial points. The ships on the film seem to have seized their imagination; the part played by the navy had become very real to them. They asked: "What happened to the ships in the winter?" "If the ships stayed in America, how did the English at home know that our men were besieged in Quebec?" One

child, confused by the rowing boats used in the attack on the Foulon, wanted to know if the English set out from home "in big ships." The general response was good, but not exceptional. The class teacher wrote : "It was the usual response of Class I. girls to any type of lesson. The one or two backward girls showed no greater interest." It had originally been intended to set the girls an exercise identical with that given before the film-showing, and to compare results. Instead, the teacher decided to try to discover the attitude of the girls by a series of questions. The first ran : "Criticism the film as regards the extra matter you learned under the following headings—Causes, Men, Events, and Results." From the answers it is evident that the girls do not feel that they learned many new facts. They had been well drilled in these beforehand, as their good preliminary papers showed. It is doubtful if all of them quite understood what was wanted under the heading "Events." It seems from some of their written remarks that they envisaged these as a series of separate happenings. All the film was one "event" to them, the capture of Quebec. Two say they learned nothing, but the others give various details. Several have a new light on the method of climbing the Heights and on the nature of the ground. "I thought that this cliff was made of rock, and that Wolfe and his men had climbed a narrow path to reach the top. It was not so in the film, as the Heights of Abraham were composed of earth and trees." They did not know of the attack on the outpost nor of the capture of the Samos battery. They had thought the battle took place immediately at the top of the cliffs. They learned many details about the battle, remarked on the absence of trenches. They noticed the dress and equipment of the soldiers, the presence of Indian allies for the French. More important, several for the first time became aware of the events of the winter 1759-1760, of the siege of the British forces in Quebec and the urgency of naval relief.

None of these girls admitted to learning anything whatever about the causes or results of the war ; they did not appear to consider the maps useful in fixing their previous knowledge on these matters. They gain interesting side-lights on the personalities of the men concerned, several girls remarking that the characters of these people become "plainer" to them. They learn of the ill-health of Wolfe, get new conceptions of Montcalm, whom some had thought of as a coward, and of Pitt, whose youth surprises them. "As Pitt was spoken of as the elder Pitt, I found him a very uninteresting person, but he was a young man shown on the film." Most of them heard for the first time of Vaudreuil, Anson, and Saunders, but many complain that they only became clear about these people and the part they played from the discussion lesson. In the lesson no one had been able to say what was Saunders' job. It is a weakness of the film that Saunders, though mentioned twice by name, does not appear in person in any recognisable way. The others are introduced by subtitles, but Anson's part is short and passive.

The second question was : "Judging from this film as a History film, do you think films would be a help to you in learning History ; if so,

why ? ” Nine girls reply “ No,” three being amongst the brightest in the class, the rest of average ability. They give as their reason that lessons of the usual type give the facts, the film only the incidentals. All but one of them, however, qualify their negative by saying in answer to a later question that the film makes the subject more alive. Apparently, these nine girls do not think the advantages sufficiently great for time to be spared. One of them definitely makes this point. The remaining fourteen think the film a help as being more realistic than anything they can imagine. “ Films can help us, as the events are much clearer, and it is not only facts, but it seems much more natural.” To the question “ Did you get more information from the film than from class lessons or individual work or not so much ? ” nine girls respond that they learned more from the film, three think there is little to choose between the methods on this score, and eleven that they learned less. Of the nine who feel that the film is of great help in learning, three stipulate for preliminary lessons. The last question read : “ Was the incident more alive ? Did the film fix it in your minds ? ” The girls are unanimous in replying that the film made the episode live ; all but three think the film will help their memory.

The main point which emerges is that all these girls feel that the film is an advantage as a further aid, but that its place is ancillary to the oral lesson. A majority of fourteen over nine think that regular film-showings would be a definite help. These girls are only 13, but they have obviously written their papers with much honesty and searching of mind. Their statements suggest caution rather than enthusiasm. Taking their opinion of the value of the method in conjunction with their answers to the first question on the subject matter of the film, my personal judgment would be that the papers suggest that suitable films would be a valuable help to them. The considered opinion of the Headmistress is the reverse. Her point of view, which demands careful consideration, is indicated by these extracts from her report : “ It is very difficult to offer criticism here, as undoubtedly good films on any subject must prove of very great educational value ; the inevitable and vital questions of time, money, and suitable classroom accommodation remain, as always, the determining factors. The majority of children in this particular school come from well-to-do homes, are well taught, have access to good books and good pictures both at school and at home, and I therefore doubt whether the additional time and expense for film work would be justified by a corresponding increase in the accuracy of their impressions and the extension of their knowledge of History.” The question raised here as to whether the value of the educational film is commensurate with the time involved in its use is fully discussed in a later chapter.¹ This Headmistress makes a further objection to the use of films which was also brought forward by the Headmaster of a semi-rural Grammar School in Yorkshire, pointing out the danger of the film in the hands of an injudicious teacher. This London Headmistress writes : “ These films, it seems to me, might prove a definite obstacle, or at any rate might tend to hamper a teacher’s research on any

¹ *Infra*, 252-253.

particular lesson given, as I take it that, in order that the film may effectually follow up and 'fix' the given lesson, the teacher must know beforehand exactly what incidents are to be illustrated, and in this way she might be coerced into giving unimportant details and information." This is surely not an objection of serious moment. It is certain, from the critical attitude of teachers throughout this enquiry, that teachers as a body will decline to use the cinema in school unless the films available are concerned with vital matters well presented.

136. Experiment 27. In three cases the film "The World War and After" was successfully shown to classes who had made no previous study of the subject. As might be expected, the most permanent results were obtained with the oldest children, a mixed class of 46 girls and boys, the two Upper Standards in a school on the outskirts of Leeds. The children were very enthusiastic in the talk the teacher had with them after they had seen the film. Two of the forty-six were frankly disappointed; the majority were full of remarks on the ease with which they could learn lessons from the screen. The children were asked to write down what they remembered of the film. Their answers are comprehensive, covering all four reels, and they have obviously grasped the general argument. In addition, the teacher set the following questions:—

(1) Say what you think of the film. This is a typical reply: "The film was one which aroused my interest. It gave me an idea of how the war started, the horrors of war, and the working of the League of Nations. I think this film would enlighten many people, change their ideas of war, and arouse their enthusiasm for the League of Nations."

(2) Which reel did you like best? Why? Give it a title. Thirteen children were most interested in the part showing the street fight, the causes and extent of the war, sixteen in the scenes showing the devastation and suffering caused by the war. Fourteen preferred the longer illustrations of the settlement of disputes by the League, the Aaland Isles dispute, or the quarrel between Greece and Bulgaria. Only three selected the reel dealing with the formation and organisation of the League.

(3) Which episode made the most vivid impression on your memory? Thirty children mention the wounded, twenty-four the scenes of destruction, eighteen the gradual darkening of the white map of the world to show the countries engaged in the war. Thirteen allude to the street fight, twelve to the many graves, the same number to the strife of Greece and Bulgaria, and eleven to John Bull's burden of war debts and taxes. The answers to the last two questions show that it is the pictorial parts of the film which made the greatest appeal, and, in the second place, that the interest of the children was held to the end of the film.

(4) Which part (if any) did you not understand? Were there any parts you thought dull, uninteresting, or too long? One boy did not understand the street fight, a not unusual occurrence, to be discussed later.¹ One found the account of the origins of the war and of the ten

¹ *Infra*, 137, 396.

disputes settled by the League from 1918 to 1926 uninteresting. Another thought dull the scenes showing the results of the war, and four were bored with the presentation of the machinery of the League. "I think the film dwelt too long on the meeting-places of the League of Nations. There was no necessity in my opinion for the painting by some famous painter of these places to be shown." In all but the one case of the scenes showing the results of the war, the parts of the film deprecated are those most lacking in action.

(5) What have you learned from the film? Here the children record briefly their realisation that the League is more than a name: "I learned from this film that the League of Nations settled the ten border disputes, that the war was started by the murder of an Austrian prince. That the League of Nations has a special council to discuss serious matters was another thing I did not know before."

(6) Any other remarks? This called forth such different comments as, "I think the conclusion of the film was very good. There was an appeal from the King asking all his subjects to support the League of Nations to the utmost of their ability"; and, "I think the film was rather a short one, unless I was so interested that I lost all count of time. It would have pleased me immensely to have seen the other films shown to the lower classes."

These classes saw the film on July 6th, and wrote down what they remembered. They then had the discussion lesson where they answered the above points. A fortnight later they wrote an essay on the film for the term test in English, and the Headmaster went over these compositions with the class. On January 20th, nearly seven months after seeing the film, the twenty-five pupils still remaining in school again wrote a free essay on its subject matter. The result was remarkably good. In spite of the difficulty of the test, the children maintain their usual standard; in this case there is little variation from their normal grading. The general lesson of the film is in all cases remembered, and much of the detail from all parts of the film. The following essay is from the boy to whom the teacher assigned twelfth place for this particular test in a group of twenty-five. His usual grade for a History answer is B, and this essay was marked B by the teacher. Nine children in the class reached the A mark for their work. That is to say, the essay is typical of the average boy, by no means one of the best written.

THE WORLD WAR

The first picture I remember was the shading-in of the different countries on a map of the world as they entered the war which was very interesting.

The Red Cross did a very great part in nursing the sick and wounded soldiers. When a soldier was wounded he was taken on a stretcher to a temporary hospital where the wound was stopped and bandaged up and then taken away from the battlefield in an ambulance to a hospital. After the war a soldiers' and sailors' home was built where crippled or blind men could go if they had no home for themselves. One picture I remember quite well was a

photograph of thousands of graves where soldiers were buried. Poison gas was one of the most terrible things used in the war and the soldiers had to wear gas-masks to save them from death.

The first picture on the third reel was one of John Bull with a heavy bag on his back which represented England and the cost of the Great War. The war debt is about three hundred and fifty thousand million pounds and the cost of the big guns and things was ninety-seven thousand pounds.¹ Another picture that interested me was Finland and Sweden each represented as a hand and grabbing at the Aaland Islands because both countries claimed it. The League of Nations was formed in 1919 at Geneva where men each representing a country met regularly. The League of Nations was formed to try and prevent any more wars.

A fight started between Greece and Bulgaria because the Bulgarians said that the Greeks had killed one of their sentries and so the Bulgarians started bombing villages. The League of Nations intervened and stopped the war.

The essay will serve to endorse the teacher's report on the test, given after a minute analysis of the papers, in which every separate item of information was noted. It runs: "Twenty-five of the forty-six who saw the film seven months ago are still at school, and presented essays which show that the film has made an indelible impression on their minds. Throughout the essays the salient features of each reel of the film were generally mentioned." In this second case, the use of the film as an introduction to a subject had proved satisfactory.

137. Experiment 28. A similar experiment proved successful with a class of 40 boys whose average age was 12 years 3 months. No preparation for the film was given beyond a brief talk in which it was pointed out that the murder of the Archduke Francis Ferdinand was the occasion rather than the cause of the Great War, and that the League had been founded for the prevention of war. The boys would see on the screen the methods adopted by the League to this end. The boys wrote an essay on "What do you remember of the Film?" Again, these answers cover the whole ground. A month later the same test was given and the results analysed in detail. On the whole, the boys give their recollections in the order of the film. Twenty-four note the street fight, sixteen the murder of the Austrian prince. Only four refer to the darkened world map. Twenty mention the loss of life occasioned by the war, ten the numbers wounded. Two others mention the injured carried on stretchers, four the ambulances, five the picture of the soldiers blinded by poison gas. There are eleven references to the devastation caused by the war, while seven remember the peasants deprived of homes. Ten cite the debts incurred, six referring to John Bull and his parcels in this connection. But it was noticeable that these boys had been more impressed by the exposition of the work of the League than by the scenes portraying the terrible results of war, as a comparison of the figures following with those just given will show. Twenty-four explain why the League was

¹ A confusion with Britain's contribution to the League.

founded; fourteen give Geneva as its headquarters; seventeen comment on its representative nature. They were much intrigued by the diagram of the Council Table, with the semi-circles representing the delegates; thirteen of the boys reproduced this diagram in their answers. Fifteen give some reference to the Aaland Isles dispute, and twenty-three to the quarrel of Greece and Bulgaria. That is to say, a month after the film-showing, though no lesson or discussion at all was taken, the boys have a good recollection of all parts of the film, and see the parts in relation to the whole.

In one respect, however, this film proved not entirely suited to boys of this age. Some were confused by the scenes from everyday life introduced into the film as illustrations of international problems. For instance, of twenty-four boys who mentioned the street fight, only ten thoroughly understood its significance. Four described the scene without relating it to the rest of the film; they may, or may not, have understood. Three had partially grasped its meaning; they thought the street fight was an actual occurrence, typical of the unfriendly spirit existing before the war. Seven envisaged it as the cause of the actual war. "The first point was how a blow would cause a street fight and a street fight would happen cause a war." So confused had one boy become over the relation of the street fight to the causes of the Great War that he wrote: "The war was begun by a little boy who thumped an Austrian Prince in the back." Nine boys tell of the garden dispute; three make no connection between it and the rest of the film; three conceive of the wrangling neighbours as real men whose differences were settled by a member of the League; three make the correct inference that it is possible to settle quarrels amicably, but have not realised the point of a boundary being in question. In many classes, John Bull proved the most difficult of complete comprehension, but in this school, where only six boys mention him, three clearly understand, while three, though not realising the comparison of large war debts and small contributions to the League, have grasped the fact that war leads to heavy taxation. The boys' failure to understand these analogies completely has not in many cases led to lack of comprehension of the general argument in any essential points. It is, however, a recurring feature in all cases where this film was used with children under the age of 13½ years. A teacher in an oral lesson instinctively seeks a homely parallel for situations difficult for a child to grasp. Apparently, it is not altogether wise to carry over this practice from the oral into the visual field. A teacher explains: "It is *like* this. *Supposing* two men were quarrelling." She makes clear which is the simple illustration, which the actual fact. On the film, young children or backward older children do not always distinguish the real from the supposititious. This experiment demonstrates, first, the child's capacity to retain well suitable film material even when it is presented without previous instruction or supported by later oral lessons, and secondly, the inability of many children under 12 to understand analogies presented on the screen. This question is examined in greater detail in Chapter XIII.

138. **Experiment 29.** Another class of 35 boys of the same age were tested in somewhat the same manner. The boys had not had lessons on the League, but had been studying the Geography of Europe in detail, knew something of the new countries created after the war and of the difficulty of settling frontiers. They regarded the film as an extension of this work. "I wish all our Geography lessons were like this," said one boy. It would seem one of the advantages of the use of films that they make clear the close connection of History and Geography, for historical events are seen in their proper, topographical background; as every teacher knows, children are very prone to separate subject from subject in water-tight compartments. The results of this experiment bear out the observations made on the two earlier tests with this film. On the day after the film lesson, the class wrote an essay on what they remembered. The amount of information acquired and the clear grip of the lesson of the film are quite astonishing; the boys do not mention the parts of the film lacking in action, such as the details of the League organisation specified as dull and uninteresting by the boys of Experiment 10; the story is told in the film order, the pictorial parts receiving most frequent attention. It is only the weaker boys here who do not understand the analogies. Eleven boys are clear about the street fight; four describe it as a detached incident; three imagine it real. Sixteen out of twenty-five understand the garden scene; four give no clue in their description as to their attitude; five do not know that it is imaginary. Again, John Bull is the most fully realised; sixteen of the twenty boys who mention him have grasped the full meaning of his parcels. Further, while the general level of attainment of this class is good, the brighter boys again fail to retain their usual high grade, while the standard of the backward boys is improved. This is made clear by the following comparative analysis of the grades gained for this test and the boys' usual grades for History answers.

EXPERIMENT 29: IMMEDIATE TEST—35 BOYS

Same Grade, 13.	Higher Grade, 12.	Lower Grade, 10.
5 in A	1 B to A	1 A to B++
6 in B	1 B to B+	5 A to B+
2 in C	2 B to B+	2 A to B
	2 C to B+	
	1 C to B	1 B to C
	1 C to B--	
	2 C to C+	
	2 D to B+	

In this case the delayed test was not taken till after an interval of six months. The detail was by that time forgotten; a definite impression

remained. Chiefly, it is the illustrative examples that are remembered: the street fight, the gardeners, John Bull. The boys describe these incidents, and, though some are inevitably still confused between fact and fiction, all draw the desired inferences: that war can arise only too easily, that it is possible to settle differences without wars, that war is expensive and wasteful. Very few boys make any allusion to the devastation caused by the war. Several mention the quarrel over the Aaland Isles, but only one the breach between Greece and Bulgaria, though eleven noticed this in their first essays. This points to the fact that the film is over-long for classroom use. None of the maps are mentioned, save that of the slowly darkened world of war. Judging from delayed tests with this film and the Naval Warfare film, it does not seem that animated maps, though striking, leave a permanent impression, if more than one or two are shown on the same film. All the boys remember the essential lessons of the film—that war is wrong, and the League an effective instrument for peace. “The last part shows the finish of the war and how good the League of Nations is, and how it has stopped already a war. The film was to show how bad war is and how much money it costs.” The teacher thought the experiment successful. “for most of the boys retained the impression that the film was out to make.”

139. Experiment 30. In this case 40 girls aged 13½ saw Reel I. and Reel IV. of the League film, Reel I. dealing with the causes, extent, and results of the war, Reel IV. with how the League dealt with the Graeco-Bulgarian dispute. Between the reels a 5-minutes' talk was given the girls on the organisation of the League. The last reel showed the results of the war. People were stirred to try to prevent its recurrence. The League was formed to this end. Its headquarters are at Geneva, where there is a permanent body of clerks and secretaries. All countries in the League send representatives to the Assembly, a sort of House of Commons of the League. The Council, a much smaller body of important statesmen, meets to deal with pressing matters. In the next reel you will see how the League worked to prevent one dispute from becoming a war. Reel IV. was shown without comment.

The girls wrote a free essay on the film. These essays, though only half the film was shown, are far less comprehensive in relation to the matter presented than when classes saw the whole of the film, and this though the essayists were an intelligent Senior Class. Either the talk had been insufficient to make clear the machinery of the League, and the fourth reel in consequence was imperfectly understood, or else the class, being girls, found the subject matter of the first reel, with its hospital scenes and so forth, of infinitely greater interest than that of the last. Girls tend to dwell on the first reel to a greater extent than boys. In this case, out of 40 girls 14 make no reference to Reel IV. and 10 only very incidental allusions. In every case Reel I. looms disproportionately large in the essays. Forty minutes was allowed for the exercise. Since in other tests with this film, children were able in this time to give a

balanced account of the whole film, the failure in this case cannot be imputed to lack of time. The logical sequence of the film's presentation had been destroyed by the omission of the central reels. The experiment seems to provide an object-lesson in the need for unity and coherence in the educational film.

140. Experiment 31. Forty-five girls of average age 13+, the Senior Class of a London Senior Girls' School, saw the League film as their introduction to the topic. Before seeing the film, they were asked what they knew of the League. This proved to be little, beyond the fact of the existence of the League and that it worked by methods of arbitration for world peace. Questions elicited from the class the arguments they had heard against the League. Then the film was shown. In the afternoon a follow-up lesson was taken. First came a direct question and answer lesson on the subject matter of the film. The girls answered well on all parts, save on the constitution of the League, which had not been learned. They explained all the illustrative examples correctly. Afterwards, they were asked to supply answers to the common arguments against the League which they had given before its showing; this was done intelligently from film material. The class had found the film interesting, and the majority had grasped it well. The Headmistress reported :—

- “(1) My staff and I feel that the film is a valuable adjunct to History teaching, but that we should not like it to be substituted for other methods we use here.
- (2) The maps with the moving index were extremely useful. In this respect the film is better than the lantern.
- (3) The film we saw was shown at a very satisfactory rate for teaching purposes.
- (4) The girls enjoyed the teaching through the film and responded well at the time. The dull ones only saw the picturesque side of the film, and we think gained little value from a subject point of view.”

The length and the amount of diagrammatic matter in this film make it more difficult for the backward child than shorter films confining themselves to scenes of ordinary life,¹ but it is clear that in each of the four cases where the full League film was shown, it demonstrated the capacity of films to form an introduction to the study of a difficult subject with children in the upper classes of a Senior School.

141. Experiment 32. The last three experiments were undertaken with the film “Naval Warfare.” It has been explained that this film was produced as a revision film for pupils at School Certificate or Matriculation Standard.² In these cases it was used with much younger children. The first experiment was practically foredoomed to failure. Against my judgment, the film was used with a mixed class aged 11+

¹ Cf. *infra*, 397.

² *Supra*, 14 (e).

Standard VI., in a semi-rural school near Leeds. All the other classes were seeing films, and as "Naval Warfare" was the only film related to the syllabus of this particular class, it was shown them to prevent disappointment. Apart from stories of Nelson lower in the school, the class had merely had one outline lesson on the work of the English Navy during the Napoleonic struggle. Every possible oral help was given the children when the film was shown. The film was taken slowly, and stopped for explanation of the maps and other details. In spite of the difficulty of the matter, all the children said afterwards that they had enjoyed the film, with the exception of one girl, who said that she did not like pictures. The model ships were the most popular feature of the film. Unanimous criticism, from girls as well as boys, was, "too many maps," "not enough of the actual fighting." In the circumstances, it was unreasonable to expect the children to have gained more than a few, general ideas on naval conditions. That this was the case appears in their first papers. Of the delayed test, taken seven months later, the master wrote: "These children had little previous knowledge of the matter of the film, and it is evident that they are now left with a number of fleeting impressions which do not fit in any chronological order and are extremely jumbled. When results are tabulated, it is found that out of 35 children 6 received a higher grade than usual, 12 dropped to a lower grade, 2 dropped to a grade two lower than usual, and 15 remained the same. Those who improved were all originally in Grade C or D." It seems that even a thoroughly unsuitable film can do more for some backward children than can oral teaching.

142. **Experiment 33.** Greater success was anticipated in Experiments 33 and 34, for though the classes concerned were not very old, they had studied the subject matter of the film in some detail. The girls, aged 11+, had had four lessons of 45 minutes each on Nelson. The lessons were grouped under the following headings:—

- (1) How Nelson prevented Napoleon from winning Egypt and India.
- (2) How Nelson broke up the League against England.
- (3) Napoleon's plans for invading England—how frustrated.
- (4) Nelson in Chief Command in the Mediterranean—In pursuit of the enemy—Trafalgar.

Full descriptions of the Battles of the Nile, Copenhagen, and Trafalgar had been given, enlarged sketches of the plans of the battles taken from Gardiner's School Atlas being used.

The film was shown very slowly, with frequent explanations and with stoppages at all the maps for their inspection. Since it was clear from the girls' remarks at the end of the lesson that they had not grasped all parts of the film, the following questions were set them on the next day. Group A of 23 girls had three questions:—

- (1) Which parts of the film did you like best? Give a list. Those pictorial parts of the film of which they already knew something were the

most appreciated. Ten girls out of the twenty-three mention the "Blind Eye" incident at Copenhagen, nine the death of Nelson. Four mention the stopping of the mutiny, three the press gang, two the swabbing of the decks. Only seven girls chose out for mention the toy ships by which the battle tactics were indicated, four of these liking the demonstration of tactics at Trafalgar, three those at Cape St. Vincent.

(2) Did you find any parts of the film confusing or difficult to understand? If so, which parts? Give a list. One girl said she did not understand the press gang scenes until she enquired after the film. Ten said they found the maps confusing.

(3) Do you think the film made the subject of Naval Warfare more interesting or clearer to you than an ordinary History lesson? If so, explain how and why. Four say the film was less clear than a lesson "Because Miss X makes it so plain for us to understand." One says there is nothing to choose between the methods. Seventeen say the film makes the topic clearer, for, when told a story, "You have your own picture, but I like to see the picture real." "It let us see the things happening." "We can see Nelson as he was." One child's answer aptly conveys the general feeling of the class: "In some parts I found it clearer and more interesting than a History lesson, such as the life of the sailors aboard ship. But in the maps and towns I got rather confused and appreciated History lessons more."

Set B of 20 girls were asked to write an essay to answer the question, "What did you learn about the Navy in Nelson's time from the film that you did not know before?" Most of the girls mention some few pictorial details. Thirteen had not known of the press gang. One says with surprise, "In Nelson's time people were forced to be sailors whether they wanted to or not." Nine had not realised the great difference between the modern battleship and those of Nelson's day. Four of them are surprised that "Ships of war were only sailing vessels." One of them says, "The Navy in Nelson's time is much different than it is to-day. You can picture it better if you see some films." Nine mention the hard and dull time of the sailors aboard; two refer to the use of the lash. One has quaintly discovered that disobedience can sometimes have good results. Only three of this set refer to the illustrations of manœuvres. Two of these were now clearer as to tactics at the Nile, and one says, "I got a plainer idea of how Nelson arranged his ships." The girls feel that only the pictorial parts were helpful, and even these seem to have passed too quickly to have conveyed much information. They feel that they had been taught the diagrammatic part of the film, the routes and tactics, equally well before. One girl mentions the press gang and then says, "We knew all the other things about the Battle of Cape St. Vincent and the Battle of Copenhagen." Another, after referring to the same incident, says, "I didn't learn any other thing about the Navy as we had had it in school." The teacher thought the film erred in attempting to telescope too much subject matter into too short a space. She considered that she

had done the subject matter with the girls in more detail, but in a more leisurely fashion. The film made her feel breathless. It seemed to her valueless for teaching purposes, crowded with poor maps and not at all thrilling or interesting.

The failure of the girls to grip the film except in some of the pictorial parts becomes only too clear in the delayed test six months later. All the original forty-three girls were present. They were asked to write down what they remembered of the film. All of them refer to the death of Nelson, and, again, twenty remember Nelson putting the telescope to his blind eye. Eighteen remember the press gang scene, but one thinks Nelson thus became a member of His Majesty's Navy, and another that this is how Napoleon, and not the English, manned his fleet. Few references are made to any of the other pictorial parts of the film. Only five refer to the hardships of a sailor's lot, four to the strict discipline; four remember the men scrubbing the deck, two the midshipman on the lookout; three mention the mutiny and Nelson's concern for the men; four remark on the use of sailing-ships. Even less is remembered about the rest of the film. All the girls mention that a great victory was won at Trafalgar, but only two give the tactics employed. Three others remember that Nelson sometimes adopted the plan of cutting the line. Three describe the tactics of the Nile, but none give the name of the battle. Fourteen remember Nelson's manœuvre at Cape St. Vincent, though two of these attach no name to the battle where it took place, and one thinks it was at the Nile. Only one girl mentions the English blockade. Eight make a vague reference to being shown the route to Egypt—"We were shown maps to tell us the route that Nelson took." Ten remember something about Nelson's chase of Villeneuve to the West Indies. Only four refer to the return of the fast-sailing frigate. The accounts are scrappy, disjointed, without semblance of chronological order, and completely lacking in precision. Making every allowance for the lapse of time, it is evident that the film failed to make any impression on the girls.

143. **Experiment 34.** This Nelson film was also shown to a class of boys of 13+ who had studied the subject. No written tests were given, but a talk with the boys showed that they were as confused by the film as the girls and even more disappointed, a disappointment shared by their master. The boys did not care for the mechanical ships; they said that they were used too often, so that one engagement became confused with another in their mind. They had hoped to see Napoleon and more of Nelson and real ships in action. "I would have liked to see some fighting," said one boy, expressing the general feeling. The teacher thought the film lacking in action and unconvincing.

In view of the results of the other tests in schools of the particular type under discussion, it seems that these experiments with the Nelson film point not to the weakness of the film method, but to the inadequacy of this particular film for the children concerned. The teachers who helped in Experiments 32, 33, and 34 also participated in other

experiments, so that they had other opportunities of judging of the efficacy of the film in school. Of the experiments described in this chapter, all save the first three showed the value of the film wherever introduced in the scheme of instruction. As the reports quoted show, all the teachers except those concerned in Experiment 26 were left after the experiment feeling that they would welcome the advent of the true school film, since the film could undoubtedly perform functions in History teaching impossible of achievement in other ways.

CHAPTER VII

THE INFORMAL TESTS IN SCHOOLS IN POOR DISTRICTS

144. **Experiment 35: (a) Girls' Class.** The greatest scope for the film probably lies in the schools in the poor quarters of the towns, where the difficulties of teaching are the heaviest. Here, the teachers train the children with little help from many of the homes. The children have few advantages and cannot easily obtain books. The following experiments evidence the beneficial results arising in such schools from the use of the film. The poorer the district, the greater seemed to be the gain.

In Experiment 35 a class of 54 girls, aged 10 and in a Standard IV., were beginning a formal study of Roman Britain. The teacher estimated that three lessons were usually spent on this topic. Consequently, the three reels of the Roman Britain film were shown to the children in one lesson, and the next two spent in oral discussion, the film material serving as background. The reels were shown in this order: Reel I., Reel III., Reel II. The whole of the second lesson was spent in discussing Reel I. The period was fixed with a blackboard time line, the coming of the Celts explained, the children told that these were the people in Reel I. Now, the children were to see how much they could remember. We would make a list on the blackboard of the things they knew about the Celts. The children suggested this full list, placed down one side of the board: Appearance and Dress, Village, Houses, Work, The Chief, Religion. Each heading was then discussed in detail, the points made written up in their appropriate place. It seemed far more "exciting" to do this than to recapitulate an oral lesson of the day before. The children had thoroughly realised the site of the town, and discussed why it was in the valley and how the clearance was made. They explained correctly the construction of the houses, and gave the reason for the stockade. They remembered the people's occupations well, and under the heading of "Chief," soon came to an understanding of tribal government, the power of the Chief, and the activities of the tribal moot; the film shows the elders meeting on the death of the Chief. It appeared that the children were somewhat confused about the Druids. The term was new, and in the film first appears one Druid in white cloak, hood, and staff, and later another with grey beard and wreath. But the class knew all about the altar in the forest. The one matter about which the class as a whole was vague, was the dress of both men and women. Children notice action on the film, often to the exclusion of such things

as dress and building, unless comment on these things is made. The buildings and stockade of the village are noticed in this film, for a panorama of the village is shown.

The third lesson was spent in discussing Reel III. and Reel II. Reel III. had been shown out of its film order to give a more logical lesson sequence. The third lesson started with a reference to the Roman Empire, of which the children had had stories the year before. A sketch-map of the Empire was shown. The Romans decided to make Britain part of this Empire. The children knew the story of the landing of Julius Caesar ; the gap between his visits and the final occupation was explained. The film had shown the Roman soldiers in Britain. The south-east of Britain was conquered very quickly, as far as the Humber and Severn in four years, and then the north more slowly. Here a sketch-map of England was drawn on the blackboard, the quickly conquered south-east shaded in. Now, why had the Romans won the south so easily ? The children carried on from this point well, very quickly suggesting differences in weapons, armour, training, discipline. They described the Roman armour in detail, cuirass, helmet, shield, sword, spear—the film had been stopped and comment made on this ; they were equally aware of the Britons' equipment. They could talk about the tortoise and the shield wall, but none had been able to distinguish the Romans' "wedge" formation on the film ; it is very poorly shown.

From this we passed to Reel II., the last reel shown. The Romans stayed in Britain from A.D. 43 to A.D. 410, a very long time. In the north was constant tumult, in the south-east peace. On the film was shown life in one of these southern towns. London was one, St. Albans another, Colchester a third ; crosses were placed on the sketch-map for these. The children should describe what happened there—beginning on the outside. What surrounded the town ? The class gave details of walls, drawbridge, watch-towers. "You saw a messenger coming to the town, carried in a litter, and with a guard of soldiers. You saw the soldiers marching. They would need good roads. Who made them ?"—and followed a very brief mention of well-made roads linking up the country. "Now inside the town. It had many places just like Leeds. Where do we do our week-end shopping ?"

Answer. In the market.

Teacher. Had they a market ?

Answer. Yes.

Teacher. What did you see happening there ?

Answer. Many details of the dandy, the slaves, and so on were given.

Teacher. What was the name of the market ?

Answer. None of the children remembered this unfamiliar term, which was re-told.

Teacher. Near the forum were several big buildings. You saw the Governor receiving a message from the Emperor. What was the building like in which he sat ?

Answers. 1. A temple.

2. A church.

Teacher. That was the town hall. What did the Romans call it? Again the new, difficult word had not been learned. Here it was explained how the Romans tried to rule well according to law, and to teach the Britons the advantage of obeying wholesome rules.

Teacher. What else did you see the Governor doing?

Answer. Being rubbed.

Teacher. Where?

Answer. At the baths—and was given a notice of the baths and their place in the social system.

Teacher. Did you see him doing anything else?

Answer. Having a party—and low tables and couches for seats were remembered.

Teacher. Which would you like better to live in, a Celtic village or a Roman town?

Answer. All—A Roman town.

Teacher. Why?

Answers. 1. They had nicer buildings.

2. It was more peaceful. They kept the laws.

The lesson was concluded by a brief mention of the reasons for the Romans' departure from Britain, and the regret of both Britons and Roman settlers at this event.

This seemed a very successful experiment in the use of the film as an introduction to a topic. It exemplified the ease with which a film can be worked into the usual lesson scheme. Although many obvious gaps have been left, a fair amount of ground has been covered for the space of time allowed, and the important aspects touched upon. What is more, the children have gone over the facts twice; the lessons were in the main recapitulatory of the film. The teacher thought the special advantage of the film was the contrast of Celtic and Roman civilian life, so that the children "were better able to understand how much Britain benefited from the Roman occupation of our country." The children had remembered the film very well, especially Parts I. and III. They were somewhat less ready with replies on Part II., possibly because there is no suggestion of sequence in this part of the film, or because the material was more strange. The children obviously gained most from those parts of the film for which they had some background. The experiment suggests in the first place that a film is quite useful as an introduction to serious study when already many tales are known—it certainly dispels any "staleness" in such cases; and in the second place that there is less likelihood of a long film being of value as an introduction to an entirely new topic, so far as a comprehensive knowledge of detail is concerned. It can undoubtedly, used in this way, create both a striking general impression and real interest.

145. Experiment 35: (b) Boys' Class. This point was made by the teacher of the corresponding class of 51 boys, with whom an experiment with the Roman Britain film was conducted on similar lines and with almost identical results. One of these boys questioned whether the

Chieftainness would spin, on the grounds that the Britons bought their cloth from Phoenicians. He referred for evidence to a picture on the classroom wall. The master wrote of the experiment: "I think this film is specially useful in depicting the life of a period largely speculative. The detail shown of the various phases of life gives a basis for amplification in future lessons. The response of the boys in the follow-up lessons was very good indeed. The film had certainly had a stimulating effect. I think, however, that the excellent response was partly due to the facts already known from many historical stories previously told. I am inclined to think that the film would be equally valuable if shown after lessons on the period had been given, so that emphasis would be given to what had already been taught."

The children remembered the films well in the delayed test taken three months later. The results of both boys and girls were slightly above the usual level, taking the classes as a whole. Again, the improvement of the lower grades is balanced by some deterioration amongst the brighter groups. The analysis of the boys' marks is given to exemplify this fact.

EXPERIMENT 35: DELAYED TEST—42 BOYS

Same Grade, 22.	Higher Grade, 13.	Lower Grade, 7.
6 in A	2 B to A	1 A to A—
9 in B	1 B to A—	3 A to B+
5 in C	7 B to B+	2 B to C
2 in D	1 C to A—	1 C to C—
	1 C to B	
	1 C to B—	

The girls' mistress sums up her impressions at the end of the report by saying: "It would be of great advantage to the teaching of History if a series of films could be shown periodically."

146. **Experiment 36: The Lesson.** Reels II. and III. were shown to boys aged 10 years 3 months, another Standard IV., who had finished a series of lessons on the subject six weeks previously. On this occasion, considerable oral comment was given as Reel II. passed through, a series of oral sub-titles more suited to the age of the children than those actually on the film. The children were very interested in the detail added to their previous knowledge by the film—what the basilica was like, how the drawbridge was raised, that there was massage, not merely swimming in the baths. For the army, they were surprised to find other standards than the eagle of the legion; the battle scene corrected a false notion that the Roman javelin was always used as a species of pike, never as a missile weapon. Again, certain weaknesses in the film brought queries from the children: "Why was a Briton signalling in the watch-tower of the Roman town?" "Why did that chariot with the Chieftainness go all that long way by itself?" "Why did the Britons advance with the

chariots and then just go away ? ” “ What was that man doing stroking his hair ? ” (the Roman dandy). The teacher said he thought that the film had “ brightened things up ” for the boys and stirred real interest. The film had been a help to himself in many details. In his written report he notes : “ The response of the children to the film was very good. Not only were questions well answered, both by normal and backward children, but many thoughtful questions were asked, *e.g.* ‘ How could the Britons fix knives on their wheels ? ’ ‘ Would the chief lead in battle ? ’ ‘ Had each regiment a different standard ? ’ ‘ Did slaves carry the standards ? ’ ‘ Would a messenger go about fourteen miles with a message ? ’ It was interesting to note that many backward children took part in the discussion. The boys were particularly interested in the social side of the film. Dress, gait, habits, etc., caught their attention most. The boys thought the film helpful to them. In their own words, ‘ The teacher can only give descriptions, while the film is lifelike. The teacher can only give a plan. ’ ” The interest of the boys in the reel on social life, and their observation of buildings, dress, and so forth, seems directly due to the full oral comments, purposely made because it had been noted in earlier experiments that children learned little from Reel II. without such help.

147. Experiment 36: Immediate Tests. The boys wrote free essays on whichever reel they preferred. The numbers are almost equally divided between the reels. In describing Reel II. they dwell on the basilica, its plan, interior, purpose, the scenes enacted there in the film, and on the drawbridge and the litters. Only two mention the town walls ; no clear view is shown of them in the film. Only two mention the massage scene and one the feast ; boys remember purposive action rather than such set scenes. So, in talking of the army, few remember the camp or the standard. The boys are chiefly interested in the battle, but they describe such things as the bugler, the soldiers’ packs, the fallen soldier. They are deeply impressed by the uselessness of the Britons’ rush against the shield wall.

The essays show a general improvement of standard, as the subjoined analysis of marks shows :—

EXPERIMENT 36: IMMEDIATE TEST—23 BOYS

Same Grade, 8.	Higher Grade, 13.	Lower Grade, 2.
2 in A	1 B to A	2 A to B
3 in B	2 B to B+	
1 in C+		
2 in C	1 C+ to B	
	3 C to B	
	2 C to C+	
	1 D to B	
	1 D to C	
	2 D to D+	

Commenting on the two A boys who do badly, the teacher says of one that he concentrated on his writing, of the other that he "revels in learning facts solidly"; this method was not suited to his disposition. The teacher's final note on the early work is: "I should like to note that the backward boys have progressed in their knowledge at a far greater rate than the bright ones."

148. **Experiment 36: Delayed Test.** Six weeks later, in which period the Christmas holidays had intervened, the master set the following test to the boys:—

EXPERIMENT 36: DELAYED TEST

Reel II.: Romano-British Life

1. How did the Romans enter a town?
2. What happened in the watch-tower?
3. How did important people travel about a town in Roman Britain?
4. What was the open space in the centre of the town?
5. Describe the dress of a Roman man.
6. Describe the dress of a Roman woman.
7. What happened in the town which caused some people to be arrested?
8. Where were prisoners taken? Describe the building.
9. How could you tell a very important Roman man?
10. Why did the messenger come to the Governor?
11. What did he bring?
12. Say what you saw in the baths.
13. Describe the dining-room of a Roman house.

Reel III.

14. What differences did you notice between the Roman army and the Britons in regard to—
 - (a) Discipline;
 - (b) Weapons of defence;
 - (c) Weapons of attack;
 - (d) General clothes?
15. What can you remember about a Roman army on the march?
16. Who was the standard-bearer?
17. What methods did the Romans use when fighting?
18. Describe what happened before a battle and during a battle.
19. How could you distinguish a Roman officer from a common soldier?

Two papers are quoted, the first the best paper sent in, the second an average paper.

Paper 1

TEST ON FILM

1. By a large wooden drawbridge.
2. The man was signalling with flares.
3. By a litter and escorted by slaves.

4. The market-place.
5. He wore a long loose robe and a pair of sandals.
6. She wore a tight-fitting blouse and a long skirt.
7. The Britons were mocking the Romans and they began quarrelling.
8. To the hall of Justice where they were tried.
9. By a piece of braid round his head.
10. To make the people pay more taxes.
11. A scroll.
12. Rich men being massaged.
13. Some long couches and a long table.
14. (a) The Britons' army went any way, while the Romans had discipline and did what they were told.
(b) The Britons had a little shield. The Romans had armour and a large shield.
15. They left any men who lagged behind.
16. The man who carried the banners.
17. Wall of shields, a wedge.
19. By the brush on his helmet.

Paper 2

TEST ON FILM

1. By a drawbridge which was worked by a wheel.
2. A man stood on the top of the tower and he was signalling with a torch.
3. By a litter and the slaves carried it.
4. The market-place.
5. A Roman man would have a big cloak wrapped round and on his feet he wore a pair of sandals.
7. A Briton and a Roman started to quarrel.
8. So two Roman soldiers arrested them and took them to the Town Hall, and on each side of the building there are pillars.
9. Because he had a border round his cloak.
10. To tell him a message.
11. A scroll.
12. The Governor.
14. (b) With a shield.
(c) A short sword and a big spear.
15. If a man dropped behind they would leave him.
16. An officer.
17. They formed a wall of shields.
18. All the British women cheered.
19. He would have a kind of brush in his helmet.

The teacher submitted the class list for this test, compared with marks for a similar terminal test :—

Boy's Number.	Percentage in Terminal.	Percentage in Film Test.
1	82	72
2	76	54
3	72	48
4	72	42

Boy's Number.	Percentage in Terminal.	Percentage in Film Test.
5	68	69
6	65	51
7	64	51
8	62	Abs.
9	61	30
10	58	54
11	56	57
12	55	42
13	51	45
14	50	57
15	50	51
16	50	48
17	45	45
18	44	39
19	44	30
20	40	30
21	36	36
*22	34	54
23	27	Abs.
24	21	21
*25	12	36

The teacher comments: "Dress, buildings, and such things as scrolls seem to have been well remembered. The details of battle, methods of warfare, and weapons seem to be the weakest point. It must be remembered that I only gave the boys 35 minutes in which to do the test, whereas in their terminals over 60 minutes was given. The boys on an average have lost ten marks each, but I have not allowed for the fact that in the film test they had no revision. The backward boys, however, have retained their usual standard or have made rapid improvement (*e.g.* 22 and 25)."

149. **Experiment 37:** (*a*) **Boys' Class.** 50 boys aged 11 saw the Roman Britain film along with a younger class chosen as the real testees. Standard V., therefore, had no oral lesson, but they were given a History period to tell what they had learned from the film, whether it helped them, and if so, how. They had studied the period in considerable detail, for children of this age, just a year before. At that time they had learned many of the things they write of as being new to them, but had doubtless forgotten and been newly impressed. The number of references made to any incident is given in brackets. In the first reel the greatest number of references are made to the occupations of the Britons, pottery (28) and basket-making (21), wheat-growing (19) and spinning (11). These children had thought of the Briton of the period chiefly as a hunter. Eleven children mention the stockade round the village, ten that the Britons closed the gates at times of danger. In the second reel, eighteen mention the drawbridge with the slaves turning the wheel, thirteen the signalling with torches, the same number the Roman soldiers acting as police. In Reel III., sixteen mention the chariot display and the knives on the wheels, ten the Roman wall of shields, eleven that a Roman who

fell on the march was left untended. Most of the points in the film were referred to by some child as strange to him. Each boy gave five or six points.

Their statements show that the film, though unaided, has left a real impression. "I learned the Britons went to war with skins of animals on, while the Romans wore armour." "The first thing that drew my attention was the Roman wall of shields, and hopeless it was for the Britons trying to fight against it." "I learned the different characters. The Britons lived more uncomfortable than the Romans"; for this child the statement that the Romans were more civilised than the Britons has acquired meaning.

For the helpfulness of the film, several refer to the gains in information. "I learned a lot more about Roman Britain than I had been told." "It showed more clearly and a lot more than we had learned." Others say, "It was more real and interesting." Some "understand it better" from the film, and the helpfulness of the combination of visual and verbal methods is definitely mentioned. "It is that it tells you the thing and shows you it." One says, "There is much more life in it"; another, "We saw the pictures of them walking about." Several find the film more convincing than speech. "I understood a lot better after seeing the film because I could see for myself"; and "The reason why I liked it was that before I had only heard it, but after the film I know it must have been true for I have seen it. I understand the history of the Romans and Britons better now that I have seen it in a film."

150. Experiment 37: (b) Girls' Class. The comments of the corresponding standard of 52 girls were even more interesting. The girls seemed rather more fluent at expressing their views. They each give from three to ten new points of information drawn from all parts of the film. Even more of their references are from Reel I. than in the case of the boys. The scenes connected with the Druid and the altar have impressed these girls, but they are chiefly struck by the fact that the Britons had a life something like their own; they have become far less remote. "It is more clear to me how they got their food and living." "I never thought that the Britons knelt down to pray." "I thought that they did not use baskets, but they make them. I did not know that they used pots. I thought they bent over some kind of a well to get a drink." "I never thought that they could spin thread in those days."

Their explanations of the film's helpfulness resemble those of the boys. Sixteen are pleased at the extra things learned. "I didn't know half as many things as I saw on the film." Twenty-two find the film easier to understand and clearer. "I liked the film because I can understand what the teacher tells us about. Now I have seen the film I will know what the teacher means." "I didn't exactly catch it when our teacher was telling us about the knife-wheeled chariots, but I do now." Five say the film is more interesting than usual lessons. "I liked it better because it seemed more interesting. When the teacher told me it seemed as though they

had a dull time." Three liked pictures better than words. Three say what many others obviously feel, that it was more real. "I understand the history of Roman Britain better than before because I have seen them on the film, which was like real life."

Two months later a delayed test was done by these forms. Both boys and girls recalled a great deal from all parts of the film. They naturally remember best the points already noticed as seizing their attention on first seeing the film, pottery and basket-making, the Druids, the drawbridge, the knived chariots and the battle. The girls' teacher remarked how she had expected her class to be nonplussed at the demand for the second account of the film, and that the girls would write only a sentence or two. But they were still writing at the end of a lesson period. The teachers were "amazed" at the amount recalled; it was far more than was usually retained after such an interval.

151. **Experiment 38.** Another set of girls in Standard V. in a neighbouring school saw the Roman Britain film for revision purposes. The film was shown with a brief indication of the subject matter before each reel, and with much comment during the film. In the following lesson the girls proved to know all the reels well, but were most interested in Reel I. "It gave us ideas how things were made in those days." The teacher reported, "Throughout the period of questioning, the girls who usually are not very quick to answer were much more alert." This had been the case not only for questions testing merely observation of the film, but for those requiring more thought, as in the discussion on why the Romans won. All the reasons to be inferred from the film were very quickly supplied. When this last reel was under discussion, one child remarked, "It was not a bit like a battle to-day, was it?" and the class worked out the contrast between battles then and now, referring to numbers, arms, artillery, trenches, amount of loss, and so forth. In talking to their teacher after the lesson the girls said: "I like it better than reading history books." "We learned more than when we were actually told." "I enjoyed every little bit of it." The first essays were good on the whole, though some were scrappy, and in some cases the children had confused scenes from the British village with those from the Roman town. These faults recurred in the delayed test taken six weeks later, but not to the same extent. The teacher thought that, considering the lapse of time, many of the second essays were better than the first though there had been no intervening instruction; they were less disjointed than the first set; some grouping process had been unconsciously performed. The appended lists will show that the general standard was slightly raised in both tests:—

Girl's Number.	Usual Grade.	1st Film Test.	2nd Film Test.
1	A	B+	B
2	A	A—	Abs.
3	A	A	A
4	A	A—	Abs.

Girl's Number.	Usual Grade.	1st Film Test.	2nd Film Test.
5	A	A	A
6	A	A	A
7	A	A	A
8	A	A	A
9	A	A	A
10	B	B+	B+
11	B	B+	B+
12	B	B+	B+
13	B	B+	B
14	B	B+	B
15	B	B+	Abs.
16	B	B+	B
17	B	B	A*
18	B	B	B
19	B	B	B-
20	B	B	C
21	B	B-	B-
22	C	B	Abs.
23	C	B-	B-
24	C	B+	Abs.
25	D	A-	B*
26	D	C	C*

Three A girls do less well than usual (1, 2, 4). One of these drops to B in the delayed test. One girl rises from B to A in the second test (17). Of the two D girls (25, 26), one reaches a much higher grade in the first test, and, though she forgets much of what she learned, retains far more than usual. The second D girl maintains the slighter improvement first made.

152. Experiment 39: The Lesson. A class of 47 boys in a London school saw all these Roman Britain films, shown with occasional comment. Their average age was 12 years 2 months. The teacher took the follow-up lesson. The boys, asked what they had learned from the film not previously known, mentioned :—

1. The Queen crowning herself. The boys would have expected a Druid to perform the office.
2. That the Britons had precious metals. The extent of mining operations before and after the Roman conquest was discussed.
3. Raising the drawbridge by a wheel.
4. The signals made with torches.
5. The worshipping of the trees. The teacher asked what other races worshipped the spirits of the woods and had suggestion of Chinese, Greeks, and Indians. The teacher reminded the boys of the names of the days of the week, and of how the Saxons worshipped Nature Gods.
6. The Britons' chariot display before the battle.
7. The Roman wall of shields.
8. The Druids' sacrifice of humans.
9. That the Britons were accompanied to battle by their wives. The boys thought it would hinder rather than encourage the fighters. They discussed the fact that it was possible for the women to go with the

army since the battlefield was not far from home—unlike the fighting in the Great War.

10. The sickles the men used for fighting.
11. The women unbinding their hair. The teacher asked for examples of similar ways of showing grief and was given that of the Jews rending their clothes and putting ashes on their head.
12. That the people used to drink from the same cup. The teacher told of the mediaeval loving-cup.
13. That the Governor used to have massage. The teacher asked what was meant by massage and the class suggested, "Rubbing in oil" and "Rubbing bodies to get them finely shaped." The master asked if they had ever seen a footballer rubbed down. "Yes." "Why?" "To make him fit." "To make him unstiff." "To make his limbs easy." The teacher supplied the word "supple," and instanced the use of massage to-day for footballers and runners.
14. One boy asked what the man was doing who gave the mirror to the Governor. The class decided that this was the barber, and that barbers have been flatterers through the ages to encourage the return of their clients. Another boy was surprised that mirrors were in use so long ago and that the mirror in the film was very modern-looking.
15. Another boy said that it looked as though the man with the torch was using the Morse Code.

The teacher then put some questions to the class. He first made sure that the boys had understood some points of detail. It appeared, for instance, that most had noticed the attendant with axe and rods in the basilica. The teacher gave the name "lictor," the boys thoroughly appreciating a reference to its relation to "a licking." The master then used instances from the film to emphasise the fact that the Romans were conquerors in occupation of Britain, so that Britain was part of a wide Empire ruled from Rome: rebellious Britons were put to tasks like turning the drawbridge and carrying burdens; a message came to the Governor from the Emperor at Rome. Discussion of the difficulties of defending the long frontier of the Empire led again to mention of the battle and a contrast of the equipment and tactics of Romans and Britons.

The boys were then asked if they wanted to know anything else about the things seen on the film. They were anxious to discuss the battle. "Were the knives of the Britons poisoned?" "How were the knives fixed on the wheels?" "Would the Romans have a password for when the men who had to fall out caught up the army?" One pupil asked if the Britons really grew corn before the coming of the Romans. "It says so on the film, but we learned before that the Romans taught the Britons to grow corn." The teacher explained the improvement in agriculture under the Roman rule.

153. Experiment 39: Boys' Attitude to the School Film. This master was disappointed in the film and considered the enquiry belated. His boys went nightly to see super-films and talkies. They would find no thrill in such films as "Roman Britain" and would not long give them

special attention. It was decided to ask the class for their opinion. This was done when the boys reassembled for afternoon school when the teacher was alone with the class. He deliberately weighted the scales against the film and hasty judgment, pointing out to the class the expense of producing historical films and of installing projectors. Educational films would be something like the one seen that morning. Did they get sufficient help from the film to justify the expense? All the boys said "Yes." They gave various reasons; the teacher thought the general feeling was expressed by the boy who said, "In the film we can see things we can't imagine when you talk to us."

The teacher thought the film had aroused the interest and enthusiasm of his boys. It was difficult for a History teacher to create the correct atmosphere of time and place. Films had great possibilities here, and "to some extent this film succeeded in conveying the facts that the Britons lived and worked as human beings; that they were real people who were in turn happy, busy, superstitious, warlike, and that they fell sick and died." From this point of view this film "had undoubtedly achieved much more than the ordinary lantern."

154. Experiment 39: The Written Exercises. The class had last studied Roman Britain at a period varying from six to twelve months before the film-showing. They had had the use of their text-books to write a preliminary essay on Roman Britain before seeing the film. After the film, they again wrote an account of the period. The teacher reported: "The work done after seeing the film shows little advantage over that done immediately before, save that certain minor details are introduced. There seems reasonable grounds for believing that the visual appeal of the moving picture is of definite help to the backward boy, but he remains at a disadvantage when asked to record his impressions."

In this report, the point was also made that such a use of the film did not indicate its real value. "Naturally the best of films cannot achieve its maximum effect at one showing. The skilful teacher would concentrate attention on particular parts of the film at successive projections. The fact that the machine used could be stopped at will was a very great asset from an instructional point of view."

Of the delayed test, taken two months later, the master wrote: "The retention of facts and incidents shown is very good. There is no striking case of any measurable difference between the results of usual methods and those of the cinema. The thing that has impressed me is that where there was co-operation of teacher with film either during, as your own comments, or immediately following, *there* has been the most effective work. Even a film needs an explanation over and above captions." Repeated evidence is gradually establishing this point.

155. Experiment 40: The Lesson. In only one case was this film used with a senior class, this being with 40 boys aged 13+, Standard VII. of a Leeds school, who had studied the period during the previous year in

army since the battlefield was not far from home—unlike the fighting in the Great War.

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155. Experiment 40: The Lesson. In only one case was this film used with a senior class, this being with 40 boys aged 13+, Standard VII. of a Leeds school, who had studied the period during the previous year in

Standard VI. Immediately before each reel a brief explanation of its contents was given. This was one of the early experiments, so that the film was shown in silence, save that the long sub-titles of Reel II. were read aloud. The film was stopped to read the sub-title on the basilica, and at the same time to explain that the Governor mentioned was the Governor of all Britain, not just of this town. The film was also stopped for the English version of the letter concerning the double tithe of corn to be read. I took the follow-up lesson. All the boys except three had been most interested in the battle scenes. Of the others, one liked the middle reel because he had not previously understood anything of life in a Romano-British town. One liked all the parts connected with the drawbridge, its raising and lowering, the signalling. One preferred the first reel because it was interesting to see early processes like pottery-making and spinning. Few questions were asked. Two were unconscious criticisms of the film. "Why did the Britons attack one line at a time when there were so few of them?" "Did the Romans march in so thin a column?" The British attack in relay has often been questioned, and the very "straggling" nature of the Roman line of march has been severely criticised by teachers throughout the enquiry. Nor did the boys volunteer much information on what new matter they had gained. Again, a boy said he had never thought of the Romans having looking-glasses. There was no "pertness" about this remark. The use of the looking-glass is a small human fact about the Romans which strikes the scholars; the film humanises history for these children. Another boy said he had learned what Roman helmets were like, a third that he had not understood the Roman drawbridges before. No other film-acquired facts were mentioned, but the class had learned much more of which they were previously unaware, as the course of the lesson showed.

After this general discussion we embarked on a "question and answer" lesson on the subject matter of the film. The response to questions on Reel I. was good, but one or two answers showed that one view of a film will not correct long-standing, false impressions. One boy said that in the first century A.D. the Britons in the south of England were all clad in skins, though not one person is thus clothed in Part I. of the film. Another boy said their arms and tools were made of flint, in spite of a sub-title referring to iron sickles and weapons obviously of metal. The boys had gathered far less from Reel II. This is probably because its subject matter was almost entirely new to them and consequently was not readily assimilated when the reel was shown as part of a long film. In later experiments, like Experiments 36 and 38, fuller oral commentary ensured the learning of this part of the film. It was not of serious moment that the boys had failed to learn the terms "forum" and "basilica," but of greater consequence that only one could volunteer any information about its interior when the particular building referred to had been made clear by reference to the Governor's business life. The one answer, "Like a cathedral," was given. None of the others remembered anything about the letter from Rome and its reception by the Governor.

The boys appeared to be interested in the lesson, but they had gathered little from this part of the film except concerning the drawbridge, about which they were all ready to talk. Forty-five minutes was spent in discussing these two reels and setting them in their proper historical background, so that no time was left to deal with Reel III.

The boys were asked at the close of the lesson what they thought of this way of learning history. All the class said that the film was both more enjoyable and more helpful than usual lessons, and all repeated the same reasons. "It seems more real than in books." "We see the actual persons." "They seem more like human beings than when we read." In spite of the weak response to questions on Reel III., the Headmaster and class teacher thought that the boys had taken more than their usual share in the discussion. These boys' difficulty in finding words had to be considered.

156. Experiment 40 : Written Exercises. An essay was set on the last reel. The boys wrote on "Romans and Britons at War" four days after seeing the film. The Headmaster decided to allow only 30 minutes for this exercise "to minimise time and to concentrate effort." Of the 31 boys who took the test, 23 obtained their usual result, none deteriorated, 8 did better than usual. Seven C boys rose to B, and one D boy to C. Of this written test the Headmaster wrote: "The amount of detail observed and the effect on the mind of the pupil was good, far better than I anticipated." But in this case, as often, the value of the film appeared far more in the delayed test taken two months later. This is the Class Teacher's analysis of the boys' marks :—

EXPERIMENT 40 : ANALYSIS OF DELAYED RESULTS —29 BOYS

Same Grade, 16.	Higher Grade, 12.	Lower Grade, 1.
3 in A	1 B to A	1 B to C
7 in B	7 C to B	
6 in C	2 D to C	
	2 D to B	

In the delayed test the boys show themselves predominantly interested in Reel III., but many begin with a description of Britain before the Romans came, and it is a very rational description. Necessarily brief, it contains the more essential matters shown on the film, points concerning their occupations, quick reference to pottery-making, basket-making, hunting. Film material is given combined with that from other sources. They have not yet rid themselves of the notion of every Briton wearing skins in A.D. 49. They pass over Romano-British civil life more quickly. Here drawbridge and watch-tower are their salient memory. This naturally leads to talk of rebellion and of the rival armies. They quickly pass to the battle scene, but they have realised the essential contrast between

Roman discipline and training and the unruly British force. They are impressed with the futility of the British rush against the Roman shield wall ; many vivid accounts of this occur. The method of carrying kit is remembered, the Roman short step for forced marches, the plight of those who fell. Several mention the standard and give correctly the symbol S.P.Q.R.

The Headmaster had meantime been noticing the boys. He sums up his impression of the whole experiment thus :—

- “ (1) Films are of great use to average boys to help and fix imagination.
- (2) If the class have studied the subject previously it (the film) stimulates further reading and enquiry.
- (3) Films of people, actions, work, habits, give a more lasting and useful background for personal, formative imagination than do scenes or buildings.
- (4) My doubts about below average boys receiving much benefit from special films are now removed. The films undoubtedly aroused the interest of even those who have but little imagination to draw upon.
- (5) All historical films must have preparatory teaching or reading to secure sound and progressive, reasoned imagination.”

It is interesting that this Headmaster appends to his signature on this report appreciative of the helpfulness of films the note, “ Thirty-five years a user of lantern slides.”

These six experiments involved nine classes of girls and boys of ages ranging from 10+ to 13+ ; in every case the experiment convinced the teachers of the value of the school historical film.

157. Experiment 41 : The Lesson. In Experiments 41, 42, 43, the Wolfe film was used as an introduction and with uniformly good results, though none of the classes were above the age of 12. The first case was with 33 boys aged 11 years 9 months, in a London school. The class had had one lesson on the causes of the Seven Years' War, and had read the chapter “ The Capture of Quebec ” from *Chambers's History Readers* in a silent reading period. It was understood that the class was a group of particularly dull boys, so that a perfectly straightforward lesson on the film was afterwards taken with them. Both the Headmaster and the Class Teacher were surprised at the response. The Headmaster objected at the close of the lesson, “ Fifty per cent. of your questions were not questions of observation of the film ; they tested intelligence,” but he agreed that the boys had found answers for most of them and thoroughly enjoyed the attempt. The Class Teacher reported : “ The film-showing was of great value as it gave the class a background for the follow-up lesson. The response in class was much improved. This was specially marked in the backward boys.” One boy was conspicuous throughout the lesson for his eagerness to answer and for the

good sense of his replies. When the teacher was asked after the lesson, "Is the boy in Desk 2 exceptionally bright for this class?" it transpired that he was "the dumbest boy in the whole school," and usually quite indifferent to history lessons.

158. Experiment 41: Written Exercises. His essay on the film, printed below, was far above his usual average. He rose from a usual D to B. When his reputation is remembered, I think it will be agreed that he has profited considerably from the film.

"Pitt called for Anson the leader of the English Navy. He ordered a large navy to sweep the French off the sea. When this was done he chose Wolfe to go out with a large army to America. Wolfe made several attempts to take Quebec but was defeated. He landed in Foulon Bay. Then he attacked the outpost. He sent a few men to climb the Heights of Quebec. When they reached the top, they killed the guards. The French heard the rifle shot but were too late. Wolfe heard the cheering of his men and he knew he was safe. More English came over. A few French shots were heard but the English attacked them and they were forced to leave the trench. The English marched towards Quebec, and the French marched towards Quebec. The English were not to fire on the French until they were forty paces from them. When they were forty paces from them they heard the order to fire. Wolfe was wounded in the hand and later in the breast. He died soon after. The English were inside the walls of Quebec. The French and the English were wanting more men. A ship was in sight. They could not make out the ship. Then they saw it was an English ship and the French surrendered."

The master considered that the whole class wrote with far more spirit than usual in this first test. The grading bears witness to this improvement.

EXPERIMENT 41: ANALYSIS OF IMMEDIATE TEST—30 BOYS

Same Grade, 11.	Higher Grade, 18.	Lower Grade, 1.
5 in B	5 B to A	1 C to D
5 in C	1 C to A	
1 in D	5 C to B	
	4 D to B	
	3 D to C	

Of the delayed test, taken two months later, the master reports: "In few cases were the causes that led up to the war given. The essential points in the film were remembered by most of the boys. Of the twenty-one boys remaining in this class, the majority raised their standard, and in no case did one fall back in grade. The following must have been impressed upon the boys: names of persons, commands and expressions used, names of places." He adds, however: "The time occupied in showing the film is a drawback." If many films were shown with the

necessary discussion afterwards, "the History syllabus for the year could not be carried out." This question of time must be set off against the Headmaster's summary of results—"As for my impression, I found the children were deeply interested and the response markedly good, particularly so in certain backward boys, and surprisingly so in one case of marked inability in ordinary schoolwork. The written work generally showed an improvement, due, I think, to the children having fuller information. . . . We shall be glad to help in any further lessons, as we consider the film undoubtedly helpful."

159. Experiment 42: The Lesson. An equally successful experiment was carried out with 25 boys, aged 11 years 6 months, in a Leeds school. Apart from the usual notion of the story, the boys' knowledge of the situation was gathered merely from 10 minutes' talk before the film, when the position of affairs in North America in 1759 was indicated. The film was stopped at the maps, and also as each new person appeared on the screen. Discussion in the lesson was keen. I was given the names of the four or five dullest boys at the beginning of the lesson, asked them all a question immediately, and so had them placed for special notice. All of them wanted to take part in the lesson. Their hands were raised for almost all the questions, and when asked for a reply they usually gave one correctly. The teacher said that in an ordinary lesson they were often too apathetic to hold up their hands even when they knew the answers.

The boys had liked best the climbing, the capture of the Samos battery, "running with the cannon," the battle, the last map darkening the new English lands, the retreat of the French on the arrival of the English fleet. This shot on the film invariably provoked laughter from school children, merriment which was a criticism of the film. They explained in the lessons that the face-about of the French on the cliff face was "too quick" and wrongly made the French "look like cowards." These boys were full of questions on the film, *e.g.* : "Did the cannon balls of those times explode?" "Why did the cannon jump back?" "Why did they put the rod in the bucket?" "What is a battery?" "Had they revolvers then?" "Why did the soldiers get near to fire?" "Who were the soldiers with the high hats?" "Hadh't the French any cannon?" "Why did they wear wigs?" "How many guns were there on a ship of war?" "What did Pitt mean when he said, 'The point of the sword has penetrated'?" "Why did Pitt walk over to the model of the ship?" This study scene is certainly artificial.

160. Experiment 42: Written Exercises. The following short-answer test was given on the day after the film-showing :—

WOLFE AND MONTCALM

1. Who was the fight between ?
2. Why did both the English and the French want Canada ?

3. Name of the Prime Minister ?
4. Besides the army, what other part of the fighting forces played an important part ?
5. Name of Chief of Admiralty ?
6. Name of Commander of Navy ?
7. Name of Commander of Army ?
8. Name of French General in command of military forces ?
9. Name of chief town English wished to capture ?
10. Name of French Governor-General of Canada ?
11. What did Montcalm try to avoid ?
12. Where did the English effect a landing ?
13. Why did the English choose this spot ?
14. Why was the outpost at Toulon not so strongly defended ?
15. What was the signal given for the English storming party to set off in their boats ?
16. Who led the first division ?
17. Were the French expecting the English ?
18. How were the English formed up for fighting ?
19. What order did Wolfe give about firing ?
20. What happened first to Wolfe ?
21. What was the fate of Quebec ?
22. What happened to the English forces in Quebec ?
23. What caused them a good deal of suffering ?
24. Where was the English fleet at this time ?
25. What was going to decide the fate of Quebec ?
26. Whose fleet arrived first ?
27. What was the result of the campaign ?
28. Mention anything which helped to cause the defeat of the French.
29. State anything you have learned about the character of Wolfe.
30. " " " the character of Montcalm.
31. Did you notice any inaccuracy in the film ?
32. Mention any other people who were settled in North America at this time.
33. Where did the French want to keep the English ?
34. Name of river (not St. Lawrence) which formed a means of defence to Quebec ?
35. Give reasons why you liked or did not like the film, and do you think you could learn history better by the aid of the film ?

The teacher wrote : " I gave a somewhat similar test at Christmas on my own history, not so many questions, and I have compared results. I thought this would be the fairest way of comparison and prove interesting."

EXPERIMENT 42: IMMEDIATE SHORT-ANSWER TEST

Boy's Number.	Percentage in Terminal.	Percentage in Film Test.	
1	90.9	82.7	25 boys.
2	84.8	84.6	Average age 11 years
3	78.7	73.0	6 months.
4	75.7	70.8	
5	74.2	73.0	

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Boy's Number.	Percentage in Terminal.	Percentage in Film Test.
6	69.6	65.4
7	69.6	75.0
8	68.1	78.8
9	66.6	63.4
10	66.6	61.6
11	60.6	69.2
12	60.6	55.7
13	60.6	80.7
14	60.6	61.1
15	60.6	65.4
16	59.0	63.4
17	59.0	69.2
18	54.5	63.4
19	48.4	65.4
20	46.9	63.4
21	45.4	55.7
22	45.4	67.3
23	45.4	53.4
24	40.9	50
25	Abs.	67.3—Very good for this boy.

The teacher's comment on the scores is: "The lower part of the table shows a general improvement. It must be remembered, however, that the Wolfe test took place immediately after the film and lesson, whereas the school test was at the end of term." His view of the whole experiment is: "I certainly think the film was of great value, and I am equally convinced that there is unlimited scope for the use of the film."

This opinion was partially founded on the boys' answers to Question 35 on their view of the value of the film. Practically every boy in the class wrote that the film made the story more "real" or the people more "lifelike."—"Because you can see the actual thing what they do, which you can't when you're reading." "Because it shows the people more living, and it shows you how to use a gun." "Because it seems more lifelike on the screen. When you just talk it seems in a dead sort of way. In a book it would say, 'The men charged, or the men scaled the cliff.' On the screen it shows you how they did it."

Twenty-four boys took the usual type of delayed test two months later.

EXPERIMENT 42: DELAYED TEST

Boy's Number.	Usual Grade in a Delayed Test.	Grade in Delayed Film Test.
1	A	A
2	A-	A
3	B+	A-
4	B-	B+
5		Abs.
6	B	C+
7	B-	A
8	B	A-
9	C	C+
10	C+	B-

Boy's Number.	Usual Grade in a Delayed Test.	Grade in Delayed Film Test.
11	C+	C+
12	C	C+
13	C+	A-
14	C-	C
15	C+	C
16	C+	B-
17	B-	C
18	B-	B-
19	C	C+
20	C-	C-
21	C	C+
22	C+	B
23	C+	C-
24	C-	C-
25	C+	C+

Same Grade, 7; Improved Grade, 13; Lower Grade, 4.

These numbers refer to the same boys as in the Immediate Test. It will be seen that not all the boys, *e.g.* 15, 17, 18, 20, 23, 24, maintain their initial improvement. This may mean that in their case the film's impression was not sufficiently deep to be lasting, or that the short-answer test was easier for the backward boy than the essay type. But many boys, amongst these some of the most backward, still do better than usual, *e.g.* 7, 8, 13, 19, 21, and 22. The general standard is raised.

The Headmaster wrote: "I was much impressed by the demonstration and its usefulness, especially to children of poor and restricted environment, with their total lack of travel and home culture, and the limited experience, both of child and parent, from whom little or no help is ever given."

161. Experiment 43. 25 boys from a Standard VI. whose average age was 12½ were allowed to see the Wolfe film, "as a treat," when it was being shown to another class in the school. Their work is mentioned because it was of such high quality, in spite of the fact that they had no previous instruction on the Quebec campaign and no follow-up lesson. The boys wrote essays on the film the day after the showing. The remarkable point is the comprehensiveness of the essays in the circumstances, considering the observed tendency of boys of this age to concentrate on climb and battle if attention was not drawn to other matters by oral discussion. The change was achieved in this case by telling the boys to make paragraph headings of the whole story of the film before commencing the essay, and not to forget, when writing, to give some attention to each heading. The class teacher had lately been devoting much attention to this sort of training. The excellent results of this film test, when a warning about balance was given, reinforce the view that the essays of children of 12 left entirely free may rather testify to what interests the pupil than to the amount he knows.

The story was remembered ten weeks later when the boys did the

usual deferred test. They interpreted the question to require the setting down of their memories in points, so that the answers lack something in spirit, but the remarkably consecutive and comprehensive nature of the replies can be judged from this paper of a very average boy in Grade B.

WOLFE FILM

“Question 1. What do you remember of the Wolfe film? Put down the points in the order you think of them.

- Answer.*
1. The talk between Pitt and Anson.
 2. The scene in Wolfe's cabin.
 3. The signal for the British to sail down the river.
 4. The talk between Montcalm and Vaudreuil.
 5. The arrival at the Foulon Road.
 6. The capture of the small French camp.
 7. The capture of the guns on the Foulon Road.
 8. The meeting of the French and English.
 9. The death of Wolfe.
 10. Capture of Quebec by British.
 11. Besieging of Quebec by French.
 12. Sighting of the ship.
 13. Landing of British bluejackets.
 14. Surrendering of French.
 15. Pitt and Anson again.”

This result was achieved by one showing of the film and the period spent on the first essay.

The teacher had not seen any oral work after the film, nor himself discussed the film with the class. His opinion, therefore, is somewhat of a doctrinaire generalisation. He said that he thought such films could not be beaten for supplying colour, life, and reality, but that they were scarcely likely to obtain from the pupil the mental effort that a lecture or book needed; for the sake, however, of what the film very obviously could do, it deserved a regular place in the school course.

162. Experiment 44. Experiments 44 to 49 tested the value of the Wolfe film for revision purposes. A Standard VII. of 20 girls whose average age was 13+ saw the Wolfe film after lessons on the Seven Years' War, in the course of which they had written an essay on the life of Wolfe. After the film, the girls wrote a second essay entitled “Wolfe and Montcalm.” There is a strong likeness in plan between the first set of essays; after a few details on Wolfe's early career, the girls describe the attack on Quebec. This resemblance is almost inevitable, since all the girls obtained their knowledge from the same sources, the teacher's lesson and their text-book. Less necessary was the girls' repetition of the phrases of the text-book. “Next morning when General Montcalm looked on the plains behind Quebec he was amazed to see lines of redcoats standing at attention.” “General Montcalm had a great surprise the next morning when he saw the redcoats lined up for war.” “General Montcalm looked

surprised when next morning a long line of redcoats stood in front of him." This kind of phrase, with no more variation than in the three examples quoted, occurs in fifteen of the twenty essays. "Wolfe was wounded three times in the battle, the last one was fatal." "Wolfe was wounded three times, the third being fatal." This was met with twelve times. That is to say, the essays, though the story is conveyed correctly enough, were in most cases monotonous and their style stilted.

The film wrought an appreciable change. There is a freshness and originality about the second set of essays entirely absent from the first. The girls are now obviously thinking on individual lines. A wealth of new material has been presented to them, from which the individual selects the scenes which have for her a special appeal. These she is obliged to describe in her own words. This is how one girl closed her two essays. In the pre-film essay she wrote, "There died Wolfe, one of England's greatest warriors, with Canada for remembrance"; the second essay ends, "The English General died on the battlefield when he knew they had won. The brave General Montcalm died in Quebec. Then Canada passed into English hands." Phrasology unnatural to a girl of 13 has given place to simple, childlike expression. The difference between the essays inheres in this natural, free expression of the second set and in extra descriptive touches. The sum of these things is a living story in place of the first stereotyped accounts.

The effect of the film had not been lost when the delayed test was taken six months later. The entirely new personages and events shown on the screen had evidently not made a deep impression. Of the fourteen girls still at school, only two mention Pitt in the delayed essay and two Vaudreuil. The children only set down such an outline story as was given in their text-book. But film memories are still so vivid that one child, for instance, describes the English as packed so closely in the small boats on the St. Lawrence that "they looked like flies." Another makes Vaudreuil say to Montcalm, in words not shown upon the screen, "You give me orders, Montcalm. Get out." The first essays after the film ignored earlier information, but in the deferred essays knowledge from all sources is well combined. In this delayed test five girls were given their usual grade. The two A girls fell to B+. Six girls improved their standard; the four C girls rose severally to C+, B-, B, and B+, two girls in B to B+.

The results of this experiment suggest a particular use for the film in schools where the children cannot easily obtain books other than the text-book, and where home circumstances do not encourage reading habits. Here use of the film can to some extent take the place of wider reading. The film, in showing that the text-book is but the dry bones of the subject, that it is not the end of everything, that there is more beyond, has in these circumstances a peculiar value.

163. **Experiment 45.** A class of 17 Standard VII. boys aged about 13 saw the Wolfe film the day after a revision lesson on the Seven Years'

War, which they had studied in detail seven months previously. The boys then wrote compositions on the film without any further discussion. The essays were comprehensive. All the clever boys in this case retained their usual grade, and some of the duller children produced work much better than usual. A delayed test was taken ten weeks later. The second set of results are remarkably uniform with the first, due allowance having been made in the marking for the interval. Two backward boys who had signally improved in the first test did not do quite so well in the later one, but they were still above their average level. One of these boys rose from C to A— in the first test and fell to B+ in the second; the other, again a C boy, scored first A then B. The analysis given of the delayed results is true of the first test except for these two cases.

EXPERIMENT 45: ANALYSIS OF DELAYED TEST—15 BOYS

Same Grade, 6.	Improved Grade, 9.
2 in A	2 B to A -
2 in B	1 B to B+
2 in C	1 C to A-
	3 C to B+
	1 D to B
	1 D to B-

The class teacher considered this film excellent to clinch work already learned. The Headmaster's impression of the film-showing runs: "One of the advantages of the film was that it infused an intensely human element into names which to the boys had hitherto been labels. It provided in the chief actors vivid contrasts which will have made a lasting impression. No boy who saw the film will ever confuse the calm and quiet of Wolfe with the keen but fussy Montcalm, nor Montcalm with the supercilious Governor of Canada.

The panorama which could be shown was necessarily limited, but the defect was overcome by judicious introduction of maps and diagrams which corrected any false impressions.

Several scenes might have been omitted without detriment to the film, *e.g.* Wolfe's handing over of his fiancée's locket to the captain, and the death-bed scenes of Wolfe and Montcalm, which were not necessary to the success of the film. The metaphor of the sword, handle, hilt, blade, and point was specially good.

As an adjunct to the teaching of History such films can be invaluable, but lessons by the teacher should precede the film, as the children can then observe with greater intelligence and comprehension."

164. **Experiment 46.** The same film was taken with the two upper classes in a neighbouring school. The boys, 29 in number, had had, two months before, four lessons on the Seven Years' War—causes, events, results. The story of Wolfe and Montcalm had been taken as one episode

in this series. It was endeavoured to discover in the discussion lesson how much light had been thrown by the film on this earlier knowledge. Discussion first centred round the maps. The boys co-operatively reproduced these on the blackboard, the whole geographical situation both before and after the Quebec campaign being thus reviewed. The maps were considered helpful by the boys; unlike most classes, they preferred the first, showing English and French territory at the outset of the war.

Then followed a discussion on the people who had helped to secure victory. It was noticeable that the younger boys lagged behind Standard VII. in this part of the discussion. Standard VII., however, had clear ideas on all the people except, as usual, Saunders. The boys thought the film representation of these people good, for Wolfe was shown as excellent at "making plans" and "not frightened though he expected to be killed." Montcalm came out well on the film. He tried to *prepare* everything, and was "thoughtful," a reference to his consideration for the watching women at the gate. The class worked out intelligently the part played by the navy.

The boys, asked if they thought the film helpful, said "Yes," and for the usual reasons; it made the topic more "clear," "interesting," and "real." One boy only had suggestions for its improvement. He would like a talkie. The Headmaster and Class Teacher endorsed the boys' views as to the value of the film. The Class Teacher thought the backward boys had responded better, though only in a limited degree. In both the immediate test, a free essay, and in the usual delayed test the boys' papers again show improvement among the weaker boys.

EXPERIMENT 46: IMMEDIATE TEST—26 BOYS

Same Grade, 16.	Higher Grade, 9.	Lower Grade, 1.
4 in A 12 in B	1 B to A— 1 B— to A 4 C to B 3 C to B—	1 A to A—

EXPERIMENT 46: DELAYED TEST—22 BOYS

Same Grade, 6.	Higher Grade, 14.	Lower Grade, 2.
2 in A 2 in B 1 in B— 1 in C	2 B to B+ 1 B to A— 3 C to B 4 C to B— 4 C to C+	1 A to A— 1 B to C+

These results show that the film has to some extent aided learning and to a greater extent, recall.

165. **Experiment 47.** In the same school, Standards VI. and VII. girls saw the Wolfe film at the same time as the above boys. The girls had studied the life of Wolfe a fortnight previously to the showing of the film. They were acquainted with the events preceding the capture of Quebec, having traced the British occupation of North America from the Pilgrim Fathers to the American War of Independence. A follow-up lesson on the same lines as that given to the boys was taken. The teacher felt that it was almost impossible to obtain any estimate of the value of the film, since the girls already knew the outstanding facts. During the film-showing they had obviously expected and waited for the appearance of certain known people, districts, incidents. Of the lesson she said: "The questions were very well answered, but there was little discussion. This was due largely to nervousness, self-consciousness. Discussions have not been customary; the girls do not express themselves at any time as I could wish." But the girls had talked about the film among themselves, and the teacher thought they seemed specially interested in the weak frame of Wolfe as contrasted with the alert, smart bearing of Montcalm, the climb up the Heights and rush on the camp, the appearance of the boats, the march of the army along the shore, the waiting for the ships in the spring, and in the maps.

The written results from the class as a whole were average. In the first test the girls were asked to tell the story of the taking of Quebec, Standard VII. from the point of view of a French soldier. Fourteen girls were given their usual grade, nine were below it, eight improved. There was no general raising of the standard of the dull children, for of those who did less well than usual only three were in A group. All these dropped to B. The teacher thought that some improvement amongst the backward should be present, since the film was shown in addition to a very recent series of ordinary lessons.

EXPERIMENT 47: IMMEDIATE TEST—31 GIRLS

Same Grade, 14.	Higher Grade, 8.	Lower Grade, 9.
5 in A	4 C to B	3 A to B
7 in B	1 C to B—	3 B to C
2 in C		2 C to C—
	1 D to B—	1 C to D
	2 D to C	

In the first test a special feat of imagination was called for from Standard VII., in the delayed test of the usual kind merely memory of the film. This helps to explain the difference in result. The best girls in the form still remain in the highest group, but none of these reach higher than a B mark, while others, usually lower, also reach this grade.

EXPERIMENT 47: DELAYED TEST—24 GIRLS

Same Grade, 8.	Higher Grade, 9.	Lower Grade, 7.
3 in A	4 B to B+	6 A to B+
5 in B	2 C to C+	1 B to B-
	1 D to B+	
	1 D to B	
	1 D to C	

The papers of these girls were conspicuously neat and well written. It seemed that they had been conscious of coming outside inspection while writing, as they had been self-conscious in the lesson; the essays were painstaking, but lacked vividness. A curious point emerged. The girls had been far more struck with the maps than anything else. Whatever is omitted in the deferred essays, some of the maps are mentioned and described: the dotted line of the marching armies, the darkening of the new British lands. Certainly the maps had received some emphasis from the fact that the film was stopped for their examination and they had been reproduced on the blackboard in the follow-up lesson. The girls then said that they preferred them "to maps in an atlas" because "they moved" and were not over-full. This dwelling on the maps in the delayed test, in view of the fact that they are selected from the midst of exciting incident, suggests that the film was really a little beyond the grasp of these girls, even though their previous knowledge came to their aid. A shorter, simpler film might better have met their needs. The subject appeals more to boys from its nature.

The girls thought the film helpful. They could not imagine things so clearly; the people were "actually seen." They saw the dress, the ships, and weapons. It was "easier to remember." The experiment left the teacher feeling that she could make use of suitable films. "A true teacher can make certain portions of history 'live.' It is those facts and incidents less interesting, 'dry' as children call them, that need vivid illustration, and films could do much to help."

166. **Experiment 48.** The senior boys of another school, 60 boys of Standard VI. and upwards, saw the Wolfe film, with only the usual comment on the maps. None of the boys had studied the period in school for two years, some not for three and four. The boys discussed the film afterwards with enthusiasm. They had learned the detail well, had realised the parts played by the several people, were eager to come out to the blackboard and fill in the sketched outlines of the maps, and were intelligent about such questions as the reason for British success. They were anxious to know if the film's account of the sealing of the cliffs was true, since the books generally conveyed the impression that all Wolfe's men scrambled up the Heights, not merely a few to clear the cliff track for the

rest. They thought their chief gain from the film was first in added information about events. Pitt's part had not been so clear before ; they had not heard of Anson, Saunders, Vaudreuil ; " the geography of the St. Lawrence " was clearer, and the position of the French ; they had previously thought Montcalm was in camp much nearer the Foulon and that the main French army was surprised asleep ; the march of the British to the battlefield and the longer march of the French had not before been realised. Over and above this, the film gave more details than the oral lesson on dress, weapons, ships, and so on, was " clearer," " more exciting," " more real."

This teacher, like many others, said that good films would be a decided help to the non-specialist teachers of history, since they had not time to acquire by reading the knowledge of detail that enables the teacher to make the subject interesting to children. Even if they knew the facts, they could not present them so quickly nor so graphically as the film. He thought that this experiment certainly showed that films of this nature were useful for reviving interest, for quick revision of subjects learned a long time before. He wrote in his report : " The response of the boys in the follow-up lesson was very good indeed. The film presented the historical facts in a way that no amount of oral teaching or individual reading could possibly do. The dress of the different characters, the surroundings, the ascent of the cliffs, the ' hilt,' ' blade,' and ' point ' of the sword, the indifference of the French Governor-General, the characters of Wolfe and Montcalm, gave life and movement to the lesson that no amount of talking could possibly equal."

The youngest set of boys, aged 12 years 1 month, 21 in number, wrote a delayed test three months later. These essays were spirited. As usual with boys of this age, attention is chiefly devoted to the climb and the battle ; only three mention causes and one results, but four mention the metaphor of the sword, four the scene between Montcalm and Vaudreuil, five the events of the winter 1759-60, and fifteen the work of Pitt. The boys good at history maintain their standard, the weak boys improve. Taking the " tail " of the class—

Of the 3 boys in Grade B

1 scores B

2 score A

Of the 3 boys in C

1 scores B

2 score A

Of the 2 boys in D

Both score C

167. Experiment 49. The senior girls in the same school also saw the Wolfe film. The Class Teacher was absent ill on the day when the follow-up lesson was taken, so that it was not possible to compare the girls' response with that usual. It seemed satisfactory but little more, certainly

not nearly so good as that from the boys. The Headmaster said this was the usual criticism ; the girls of 13 were very self-conscious with strangers—a factor already considered in discussing Experiment 47. The girls did written exercises on—

(1) What facts did you learn from the film ?

(2) Did the film help you in any other ways ?

The first question called forth a very long list of replies. The points most frequently mentioned were the method of climbing the cliffs, that Anson, Saunders, and Vaudreuil played important parts, that England's permanent hold of Quebec was not assured till the coming of relief in the spring, but details from all over the film were observed, such as the delicacy of Wolfe, the presence of Indian allies, that surrender was shown by handing over a sword. This last point caused question and comment in many schools ; it seems to be an example of the sort of life-giving detail that teachers too readily assume their children to know.

For the second question, the girls say that the film is clearer than oral lessons, more interesting, easier to understand. Several claim that it is easier to remember the film. "We can keep the pictures in our mind where sometimes we cannot think of the words." But most strongly the girls emphasise the reality of the film presentation. "It shows you the real life of the people." "It seems lifelike." "The films are just as the people have been in real life." "Because if you see it look real you can keep it in your mind like anything that is real or that has happened in our younger days."

Very few of these girls were at school when the delayed test was taken three months later. Those present remembered the film well, but there were no variations from usual grading.

168. Experiment 50. In a London school, this film was shown to Class I., 28 boys aged 12 years 10 months. The boys had made a detailed study of the colonisation of North America, in the course of which the subject matter of the film had been fully treated. The Class Teacher took the follow-up lesson. The boys were very interested ; they asked much the same type of question as those already quoted, details about military equipment and tactics. A boy here repeated the question already mentioned as asked in another school as to why Florida became black on the map in 1763 when it had previously belonged to Spain not to France. Another boy questioned the presence of women at the gate of Quebec ; it was a new idea to him that women should be so near a battlefield—again an instance of the sort of thing that films bring home.

The boys wrote a first essay on the film, and a delayed test two months later. The class teacher reported : "The response of the children in class was good, the film arousing great interest. Perhaps some of this was due to the novelty of the occasion. The presentation of historical characters as 'living' persons, the costumes, weapons, ships, and methods of warfare, seemed to be points of special interest to the children. The

written work generally was much the same as is produced on other occasions. There were, however, one or two boys who did produce much better work than usual. Both films of this type and those giving scenes of social life would be of great value. . . . It is necessary to give a follow-up lesson on any film shown, and desirable that the scholars should write on the subject matter of the film. Therefore, more time than is usual will be devoted to one point in a history syllabus. From this it naturally follows that cardinal points in history should be filmed for preference and then used as pegs on which to hang other matter." Of the delayed test he writes : " The essential points of the film were with one exception well remembered. They were also generally placed in their correct order. The new grading showed that the boys generally placed in the lowest grades, D and C, tended to move up. Of four boys graded D, three moved to Grade C. In Grade C, five out of a total of nine moved to Grade B. In the two higher grades very little change occurred. Generally, action was remembered, details of dress and the type of ship used being only mentioned in one or two cases. The small details of any action seemed to be remarkably impressed and well remembered."

169. **Experiment 51 : The Lesson.** The final experiment with this film was also with Class I. of a London school and some younger boys from Class III. Only Class I. had had a preparatory lesson. The Headmaster took the first part of the following discussion. The boys told him that they liked the film better than their usual lessons, and it helped them more ; they could see better what the places were like, they could not imagine scenes so well as this. They had learned many new facts—how the landing was effected from small boats, about the weapons and dress—and had heard of several new people. They were chiefly impressed by the climbing, the calmness of the English, the methods of fighting. They were asked to criticise the film, and enquired why the story of the reading of Gray's *Elegy* was not shown, and thought that the cliff should have been steeper. When the class was asked, " What did you think of the maps ? " there was a chorus of " Fine, sir." They were then asked if they wanted to ask any questions on the film. These points were raised : —

- (1) How was it that the British came upon the Samos battery from the rear ?
- (2) Why didn't Vaudreuil come out sooner ?
- (3) Did the English wear red ?
- (4) How was the cannon taken up the cliff ?
- (5) Were any Canadians fighting ?
- (6) Where did the Red Indians live ?
- (7) Where did the Forlorn Hope get the rope they tied to the tree ?
- (8) Why did the English wait so long before firing ?
- (9) Would the French really retreat from Quebec for one ship ?

The discussion provoked by these questions led the class into a review of most of the film. Very few children notice the sub-title that

Vaudreuil is Canadian-born, or see its implication. In discussing the reason for the jealousy between the French leaders, one boy volunteered the suggestion that Vaudreuil was jealous because people liked Montcalm better than himself. "What makes you think that?" "The people at the gate seemed very sorry Montcalm was wounded." Such remarks show that the children think about the scenes on film, make mental inferences. These boys worked out very well the causes of English success; the work of Pitt, Anson, and Wolfe, and of the navy, was understood, but only one boy had got the name of Saunders. In discussing the characters they expressed surprise at the fragility of Wolfe and at Pitt's lack of age. They had acquired a great idea of Montcalm's courage. The Headmaster said that these boys were usually apathetic, but the difficulty in this lesson was to keep them from all talking at once. They thought the film "jolly fine." Later, the boys wrote an essay on the film, and ten weeks afterwards did a delayed test. The Headmaster's two reports are quoted verbatim.

170. Experiment 51 : First Report. "The classes which took part were Class I., top standard boys of 13 and over, who received a preparatory lesson, and Class III., boys of 10 to 12, with a sprinkling of older dull boys. This class had had no previous lesson.

THE FILM. Both the film and its projection were excellent. The boys are regular film-goers and see all the latest and best films, but many spoke appreciatively, while no one made an unfavourable comparison with the trade film. It was very much superior to the films for schools which have been shown previously.

From the historical point of view it was excellently thought out. The use of detail to suggest the importance of Pitt, of sea-power, the part played by Vaudreuil, and the end of the campaign were especially good, while the main features of the attack, the climbing of the Heights, the battle, and the death of Wolfe, were well acted and adequate representations. I am sure that the film provided a better visualisation than any of the children would have achieved imaginatively from pictures in text-books or a verbal description. I think, too, that the maps and plans, especially the final wiping out of the French territory as a result of the war, were excellent.

In conclusion, I may add that the film did more teaching in its 45 minutes than the teacher could have done in several hours, and did it better. For practical use, however, either the preparatory lesson should have the film sequence in mind or the film should be shown again after a discussion of the details, or the significance of such points as the influence of Vaudreuil or the end of the war would probably not be fully grasped.

THE CLASS RESPONSE. The boys here are of very dull mental quality, and their interest is not easy to arouse even in an exciting story. Added to this, their very limited vocabulary and narrow field of knowledge makes it difficult to get them to grasp written ideas. Several boys in

Class III., for example, confused the 'Foulon Road' with the 'Forlorn Hope,' a phrase they did not grasp although its meaning was mentioned. We constantly find that even books like *Treasure Island* are too difficult for them, and that they fail to give reality to the matter they read. In view of this, I think the written response, especially from the dull boys, was well above average. All seemed to grasp the main outlines of the story, and while, of course, the novelty of the film must discount a little of their enthusiasm, I still think that the amount of knowledge gained was much greater than from an oral lesson. The more intelligent boys constantly refer to 'learning more' or 'learning better' in the sense of visualising more clearly. Such comments as 'I learnt more history in that half-hour than I ever have done in a whole morning's work,' express a general feeling. The written work shows a quite unusual grasp of detail and a fluency which is not common to their ordinary work."

171. Experiment 51: Report on Delayed Test. Of the delayed test he writes: "I have been through the papers and note the following points:—

- (1) The amount of detail and the accuracy are well above the average. The worst boys generally write utter nonsense in a history examination.
- (2) I was surprised to find how details such as the parts played by Pitt and Vaudreuil and the name of the Foulon Road had stuck.
- (3) The grasp of the full and logical sequence of events was better than I expected. I generally find that a number of boys write a good deal about one part of the subject, say, the battle or the scaling of the Heights, but make no attempt to deal with causes, progress, and results to make a complete answer.
- (4) The most pleasing thing about the result was the keenness of the boys. Our greatest difficulty is to arouse any interest at all, and even during the most exciting stories or history lessons we find some who are evidently mentally unstirred. Of course, something has to be allowed for the novelty and something for the exceptional quality of the subject and the film itself, but I certainly think the result is a great improvement on that which could have been achieved by a normal oral lesson."

These eleven experiments with the Wolfe film seem to indicate pretty clearly not merely that films would be helpful, but that they almost amount to a necessity in schools of the type under consideration.

172. Experiment 52. In Experiments 52 and 53 the Naval Warfare film was used, in both cases with senior classes who had studied the subject. The 25 girls of Experiment 52 were aged 13+. They

had not taken the Napoleonic Wars in detail, so that the film details on the European coalitions of the period would mean little to them, but they had made a biographical study of Nelson and knew about the English blockade, of Nelson's battles and his tactics. It was quite reasonable to try the film with such a lesson background. After the film the girls were asked :—

- (1) Did the film make the subject more clear and interesting, and if so, how ?
- (2) What new information did you learn from the film ?

The examination of the two answers is merged together, since in most cases overlapping occurred in the girls' papers. All the twenty-five girls thought the film made the subject clear. They cannot visualise scenes described orally with the same precision as they are shown on the film. "When you are just told about the subject, you can't see everything just as well as if you were seeing the picture itself." One child talks about the ships and their routes, the dress of the sailors, and says, "All these things, the teacher could explain them to us, but we could not see them." Another expresses the same idea in better English. "The film showed the ships and sailors more clearly than any teacher could describe." This is the complete answer of one child to Question (1) : "When we just listened to the story it was not half as plain as when we saw them actually doing it and fighting the battles, and we saw how everything was really done. We saw the costumes of the sailors and of Nelson and how the cannons were worked and fixed, and we understood better when we saw how the sailors rebelled, and it was far more interesting to see the film than to be told it."

Some of the gains in information touched on are matters of fact that the teacher had deliberately ignored, but many are things she would wish the girls to know, had time and ordinary school equipment allowed. The film evidently gave the girls a new outlook on naval life in the period. Twelve comment on the type of warship. One child "learned that in olden days their ships had to go by the wind, and to-day our ships go by steam power"; another "didn't know they had so many sails." Two children had not understood that a fleet comprised many ships. "I did not know there were so many ships used for Nelson's navy. I thought there was only one." One girl writes : "I thought the English ships were always smaller than the other countries, so that they could dodge round the other ships like they did in the Spanish Armada. They must have altered them in Nelson's time." The value of films in correcting such misconceptions is obvious.

The class was astonished at the number of sailors aboard and that the sailors had other duties than fighting and navigating. "The captain had a terrible lot of men to work for him." "The men on the ships had to wash the floors and clean the ships all over." The sailors' dress was equally surprising. "The sailors who were not important were dressed like pirates with handkerchiefs round their heads and striped shirts. I

did not know the sailors had three-cornered hats and black, patent, buckled shoes."

The girls' comments on the depiction of routes and tactics convey a greater sense of surprised appreciation than do their remarks on the scenic portions of the film. "The film was a lot clearer than if it had just been read to us. The dotted lines showed us where the ships went and the routes where they went." "I did not know the places where they fought and their journeys as it showed on the maps." "The maps made it a lot clearer because we knew which way the army went." The effect of the film in this connection seems to have been to make the children's idea of the naval warfare against Napoleon less episodic than before. "I understand the film better with the way the ships went round to Egypt with Nelson's ships following Napoleon's"; the Battle of the Nile ceases to be an event in isolated space.

The toy ships proved better at giving a general notion of the sort of tactics adopted than at fixing the details of a particular battle. "When Napoleon was laid at anchor Nelson brought his fleet and cut it in two, so he could deal with one half at a time." "It made it more clear how the English planned the battles, and how they stopped the French from getting away by breaking through the French fleet and each English ship taking an enemy ship and boarding it." "Nelson once saw an enemy ship trying to find a way out from the English ships, but Nelson saw this and broke away from his line and stopped them, and by doing so turned defeat into victory." These last quotations point to the weakness of this particular film. It seemed to pour light for these girls on the sort of thing that might happen in naval battles of the period, and to give far greater actuality to their knowledge of naval life. There is an air of pleasure about the papers, suggesting that the girls liked to see the film and felt they had profited. Yet it was obvious that the girls did not learn with precision anything beyond certain descriptive points. Tactics are noted, but not with reference to any particular battle. Too many battle plans are shown at once for clarity, and too many maps. Consequently, little knowledge of the film was retained when the delayed test was taken four months later.

Since only 14 girls remained at school, it is possible to give exactly what was recalled. Many incorporate non-film material and are allowed credit for it in marking :—

- 4 give the route to Egypt.
- 3 deal fairly well with the Trafalgar campaign.
- 3 describe "cutting the line."
- 2 give the tactics of the Battle of the Nile, mentioning the name.
- 1 describes Nelson's manœuvres at St. Vincent, but attaches no name to the battle.

Of the pictorial parts of the film, 3 mention the "blind eye" incident, 2 the mutiny, 1 the midshipman, 1 the press gang. This is an extremely poor result, making every allowance for inevitable loss. The film's im-

pression was not lasting, for it was initially vague. The actual scores are :—

EXPERIMENT 52: DELAYED TEST

Same Grade, 5.	Lower Grade, 9.
3 in B	2 A to B
2 in C	2 B to C
	1 B to D
	4 C to D

This experiment is a further illustration of the fact that in the making of these two reels the film's function was misunderstood. In attempting the sort of chronological summary which a teacher can do adequately on a blackboard, it fails to develop those pictorial parts which, given fully, would form an admirable supplement to the usual oral lesson. The teacher thought the film difficult for her girls, but she had seen other of the films in use and writes : " Films for use in school would be a great help in the teaching of history. Of the two types used, I should prefer those showing social background mainly, as I think that is most difficult to create when young children have little or no sense of 'time,' and when they come from very poor and ignorant homes. If the girls could only see one film at each stage in their history, it would be a great help."

173. **Experiment 53 :** (a) STANDARD VI. The Naval Warfare film was shown to Standards VI., VII., VIII. of a Boys' School. Standard VI. had had a lesson on the subject matter of the film on the previous day. The lesson took the form of a brief summary of English naval strategy during the Napoleonic struggle. The teacher used a sketch-map to indicate the main French naval ports, and pointed out that Nelson's object was to police these ports and prevent the union of the different French squadrons. Nelson's chase of the French fleet to the West Indies was described, and a short account given of the battles of the Baltic and Trafalgar.

After the film, the class wrote essays on " My Opinion of the Nelson Film." The two essays quoted give an idea of the general attitude. Paper 1 is from an A boy, Paper 2 from a C+ boy.

Paper 1

" MY OPINION OF THE NELSON FILM

" Yesterday we had a film in school on Nelson's famous battles. I think the opening scene was very realistic of waves guarding England's shore. I thought the comparison of a modern man-o'-war to a Nelson ship very good. On the maps being shown I got a little bored with them, the worst was the names on them being faint. The Mutiny and press gang livened it up again. On the manœuvres being shown with small ships I began to enjoy things again.

Napoleon going to Egypt and Nelson later at Copenhagen was also very boring till the little ships were shown. At Trafalgar the attack was shown by small ships making it interesting. On Nelson being shot I think he may have fallen better than he did. On a whole I must say it had its good points and its bad. But on looking at its both points I must say it was fairly good."

Paper 2

"MY OPINION OF THE NELSON FILM"

"I did not like the film. They were nearly all maps and hardly any pictures. The story was given in maps and only a few pictures of the fights. It was not as good as the "Wolfe and Montcalm." The pictures in the Nelson film were dull in places and bright in another. Also there was a lot of reading in the film. The reading was about the battles such as Trafalgar, and the battle of the Nile. Reading about the battles is not as interesting as looking at the pictures. When they was in the Sound Nelson was anxious to win the battle himself. When Nelson was on the deck of the ship and was shot he fell very gracefully to the deck of the ship. The film did not show how the small fleet of Nelson got into the Sound and beat the Danish batteries and forcing the Danes to open the towns to trade with the English."

Most of the class express similar disappointment at the swamping of realistic pictures by too great a number of maps and diagrams.

The delayed tests bear out this testimony that the film was unsuited to the boys. The most noteworthy point about these deferred exercises is that the pictorial parts of the film are not remembered. These scenes are too brief. The press gang incident is the one most often mentioned. Of the scenes aboard, that of the mutiny occurs most frequently. The route-maps are better remembered than other parts of the film. There was no attempt to describe naval tactics; only one boy does so, and for only one battle—Trafalgar. Few of the essays were consecutive. The best papers give an outline of events apparently derived from other sources and without detail. Such papers are a measure of the missed opportunities of the film. Similar summaries are produced equally well from the ordinary oral lesson.

174. **Experiment 53:** (b) STANDARD VII. Standard VII. had studied the subject in detail about five months earlier. They wrote a delayed test on the film at the same time as the other boys. Their essays are far more consecutive than those of the boys a year younger, but much shorter than their usual work. The following is the paper of a boy of A ability:—

"WHAT I REMEMBER OF THE NELSON FILM"

"The film started by showing an old time ship and a modern battleship. Then followed some maps. Then there was an amusing incident about the Press Gang and the sailors hiding in barrels. Then it showed you the battle of Copenhagen and model ships showing how it was won and when Nelson put the telescope to his blind eye. Then there was the Battle of the Nile. Model ships showed you how this worked. The enemy were anchored near the land so the

British went in between them and the land and on the outside and fired at each one they came to. Then there was Trafalgar. Here it showed you dotted lines going to America and back, the way the enemy were trying to escape from Nelson. He, however, met them later and defeated them at Trafalgar. It showed you how Nelson met his death on the *Victory*."

Both the Headmaster and Class Teachers were disappointed in the film, thinking that the boys lost interest because the film was overloaded with maps and the narrative disconnected.

175. **Experiment 54.** The *League* film was used with the upper standards of three schools. Standards VI., VII., and VIII. of a Boys' School in Leeds first saw the film without previous preparation. Standard VI. wrote an answer on "What did you learn from the film that you did not know before?" As in earlier tests, the answers show that the boys had a good comprehension of the whole of the film. Like other classes of boys, they were more impressed with the film's teaching on the work of the League than with the scenes showing the results of the war, though possibly in this case the type of question may have led to more frequent reference to the former point. Most of the boys comment on the representative nature of the League, and on the speed and effectiveness of its working. This paper from an average boy of 12 years old is typical:—

"*Question.* What did you learn from the film that you did not know before?"

Answer. 1. That the League of Nations centre was Geneva.

2. That it had settled ten would-be wars.

3. How much the war cost the world.

4. That they sent agents to look over what the dispute between the countries was about.

5. A representative of both disputing countries was sent to the meeting.

6. That the dispute between Finland and Sweden was settled in St. James's Palace.

7. The war between Greece and Bulgaria was just stopped in time.

8. That America joined the League in 1926.

9. How many men suffer from the war.

10. That small countries before the war are all joined together.

11. New frontiers have been made.

12. What things start war.

13. How soon they start.

14. 7,000,000 men were killed."

Again, in some of these papers the analogies in the film are misunderstood. Since the boys were not asked for an account of the whole film, these analogies are not so frequently mentioned. Six boys, however, two aged 14, two aged 13, and two aged 12, say that they have learned "that a street fight might cause war."

Standards VII. and VIII. wrote an exercise on the parts of the film they liked best. As usual, the boys prefer the pictorial scenes. In order of most frequent mention they refer to the street fight, the garden dispute, the Aaland Isles, Greece and Bulgaria, and to John Bull. The number of

references to the Graeco-Bulgarian quarrel show that the boys' interest has been held to the end of the film. The teachers thought that the boys in all three standards had learned a good deal from the film, but that for general use the more purely pictorial film of the Wolfe type, giving scenes from life rather than much diagrammatic matter, was more suitable for their boys.

176. Experiment 55: (a) STANDARD VI. Standards VI. and VII. of the corresponding Girls' School saw the first three reels of this film, after having previously had a short talk from their Headmistress on the formation and aims of the League. After the film, Standard VI. of 58 girls was divided into two groups. Without further discussion, Group A of 28 girls wrote an exercise similar to that done by Standard VI. boys, "What I learned from the League film that I did not know before." After marking the papers, I was left with the impression that the film had been beyond their range. They had not grasped the causes of the war. None of the girls mention the murder of the Archduke nor the quarrel between Serbia and Austria, though the street fight has taught its lesson that a dispute initially trifling may have far-reaching consequences. But again, seven of the girls thought that this scene showed the beginning of the Great War. Otherwise, the girls remember the incidents of Reel I. far better than the rest of the film, and give more space to their description. From Reel II. they have learned that many countries belong to the League. A few mention that those countries make monetary payment to the League's expenses. Many children were confused over League contributions, some thinking that the League was engaged in paying off war debts, one that all the countries engaged in the war were paying compensatory sums to the League. The John Bull cartoon was not clear to them. Many girls mentioned the Aaland Isles dispute, but few seemed to have acquired any conception of the League's methods of settling disputes, nor does the idea of changing frontiers and consequent international strife appear to have been realised. After the writing of the exercises, the history teacher had an informal discussion on the film with the girls. She felt that they had enjoyed the film, but had not really grasped the greater part.

The essays reveal some interesting points regarding the effect of films on children. This film does not explain why the Aaland Isles were given to Finland, and many of these girls attempt to find reasons for themselves; here, the use of the film has not stifled thought. One child thinks Finland was given the islands "because Finland was such a desolate country"; another explains, "The League decided to give the Islands to Finland because the steamers could not reach Finland in winter because the water was frozen. So that when food reached the Islands they could pass it on." Exactly how this operation was to be performed we are not told, but at least the child had been thinking over the matters dealt with on the screen. Further, there are many examples of the film's faculty of bringing home to children matters foreign to their experience, and which

are so taken for granted by adults that teachers leave them unexplained. These are instances:—"I did not know that the soldiers fought in towns: I always thought they fought in open spaces." "I never knew or understood how when the war was on peasants had to wander about with neither friends nor food to last them on their weary journeys." The narrow definition given by children to words, and consequent misconceptions, are evidenced by the remark, "I thought when people fled they ran, and those people from Poland didn't."

Group B of 30 girls wrote short accounts of the parts of the film they preferred. Seven mention the street fight, seven the blind basket-makers at St Dunstan's; the girls marvel at their ability and cheerfulness. Seven refer generally to the scenes showing the results of the war in loss of homes, ruined crops, to the lame and blind. Four definitely mention the hospital scenes. One gives the spreading map of world war. Seven enjoyed the garden quarrel, five John Bull. Again, this group does not understand the analogies whose presentation they enjoyed. One girl says, for instance, "Another part I liked was the League of Nations, how John Bull came and carried all the troubles away." The idea conveyed to most of these girls by the street fight and garden dispute was that a petty quarrel may start a fight which will lead to war, and they must help to prevent war by being friendly with their neighbours.

Three months later, 38 of these girls wrote the usual delayed test. It appears in them that the girls have realised that war is destructive and expensive and very easily occasioned. That is all. Very few mention the work or even the *raison d'être* of the League. Reel I. has impressed them, the scenes of destruction and the map of the war areas. Only three mention the Aaland Isles dispute; these give the name of the contestants, but that of the islands has escaped them. Two mention a quarrel over islands which led to the Great War. John Bull and the garden quarrel are remembered along with parts of Reel I. even though the analogies are not understood. The most striking thing about the delayed tests is their similarity of subject matter and the uniform level of attainment. It seems that only a few, simple, pictorial parts of the film were realised by any of the girls. These are remembered in general as clearly by the dull as by the brighter. The analysis of scores makes this plain; 24 girls are graded C.

EXPERIMENT 55: DELAYED TEST. 38 GIRLS IN STANDARD VI.

Same Grade, 18.	Higher Grade, 3.	Lower Grade, 17.
1 in A	1 B to A	1 A to B+
5 in B	1 B to B+	4 A to B
12 in C	1 D to C	5 A to C
		6 B to C
		1 B to D

177. **Experiment 55.** (b) **STANDARD VII.** Standard VII. found the film difficult, but their papers show a better grasp of the film. Two considerations combine to explain the superiority of their written work over that of Standard VI. In the first place, they were older; and in the second, the Headmistress held an informal discussion lesson with the class on the film immediately after its showing.

These girls wrote a free essay on the film. As in the case of the lower group, Reel I. looms larger in their minds than the rest of the film. They do not refer to many incidents in Reel II.; none mention the constitution of the League. Nor are they definite on the League's methods of settling disputes, but in a general way they realise how the League's expenses are met, that the League works towards peace by arbitration and has been effective in settling disputes. The mistakes in the papers suggest that even three reels were somewhat too long for these girls, for different parts were confused. Three girls, for instance, say that the slowly darkening map showed the expansion of the British Empire, another the countries conquered by England in the war. Two girls say that England is not yet in the League. The John Bull illustration still leaves some perplexed as to the relation of war debts and League contributions, *e.g.* "The Great War cost us so much money and so many lives that were lost, that it was thought a League of Nations would help us to pay the money which was used to pay for the lives which were lost."

Nor were even these older girls clear about the analogies. Of 18 who described the street fight, 6 merely describe the incident, drawing no moral, 6 realise its application, 6 have not understood. "One point is how a fight in the street will lead to a world war, all over a little boy in the street and a man." Ten refer to John Bull; one describes him simply as collecting parcels; five are clear; one partially understands—"Then we saw John Bull collecting the mail and looking at every one, seeing how many pounds they owe to the war." Three are confused, one explaining, for example, that John Bull was collecting the money to be paid "to the towns we destroyed." Fourteen mention the garden dispute, seven without reference to its meaning. One girl sees that it illustrates the League's methods of settlement, but does not realise that a frontier is in question. One child says that it was there to show that "one man can stop a street fight." Two others think it was a real event, one saying that it led to war, the other that war would have resulted, "but a fair man was passing." It is, of course, the girls in the A and B groups who explain the analogies correctly, the C girls who are at a loss.

In this case the delayed test, taken only by 19 girls after the three months' interval, establishes the fact that the film made a deep and, on the whole, correct impression. These second exercises were better than those of the immediate test. Detail has dropped out, leaving the main outline clear, though film sequence is not followed, as is usually the case in delayed tests on this film. The girls are remembering the film as about the League of Nations, so that Reel I. is no longer given disproportionate attention. Indeed, the work of the League is more stressed than the

results of the war. Many begin their essays with an account of the Aaland Islands quarrel, and the majority somewhere mention this incident. Altogether the essays are more comprehensive than those of Standard VI. The scores show that these older girls remembered the film better than they do their usual lessons.

EXPERIMENT 55: DELAYED TEST—19 GIRLS IN STANDARD VII.

Same Grade, 3.	Higher Grade, 15.	Lower Grade, 1.
1 in A	3 B to A	1 A to B+
1 in B	4 B to A-	
1 in C	1 B to B+	
	2 C to B+	
	3 C to B	
	2 C to C+	

178. **Experiment 56.** In this case, 30 senior scholars of a mixed school in Leeds saw the League film before commencing formal study of the subject. They were aged 13+. This was the only occasion during the enquiry, whatever film was shown, when all the children were not held by the screen. In the discussion with the teacher afterwards, the children said that they had not enjoyed the film, except a few exciting parts like "the bombs" in the Graeco-Bulgarian dispute. There were too many "tables" and maps. They had groaned during the showing when Reel III. began with maps. Their first essays showed a fair grasp of the film, however, though no more than an informal discussion of the film was taken with them before they wrote. Too few children remained when the delayed test was taken for judgment on results. The teacher and some of these scholars had seen the Wolfe film¹; this teacher, too, felt that her pupils gained more benefit from the first film, consisting chiefly of pictorial matter, scenes of ordinary life, than from the second with its many maps and diagrams.

179. **Experiment 57: The Lesson.** Very interesting results were obtained in a London Girls' School, where Class IIIA., 32 girls of good average ability, and Class IVc., 23 dull and backward girls, saw the film at the same time. The ages of the girls in both classes ranged around 13. Both sets had half an hour's lesson on the League on the lines of the film the day before seeing the film. The causes of the war, the constitution of the League, the names of the new countries formed in Europe after the Great War, and such matters, difficult to grasp from one view of the film, were indicated. Three days after the film-showing, the Class Teacher took a straightforward, recapitulatory lesson on the film with the whole group of 55 girls, Class IIIA. sitting at one side of the room, IIIC. at the other, for ease of judging their response. There was no doubt but that all the

¹ *Supra*, 101.

girls enjoyed the film and the lesson. The teacher reported : " In response to questions the children seemed to show definite interest in the film, and to be intelligently awake when the subject was discussed in class." It was equally sure that the film had been well within the scope of the bright class, quite outside the grasp of the other. During the first, formal part of the follow-up lesson, IIIc. rarely raised their hands for questions other than those on the pictorial parts of the film.

After the recapitulation, there followed a more general discussion to discover the girls' attitude to the film. Both groups thought they would best remember the first reel showing the misery after the war, though some of IIIA. referred to the scenes in the Aaland Islands, and one girl to the Greek and Bulgarian sentries. Both groups had most enjoyed the street fight and the garden dispute, though in this connection a IIIC. child mentioned an unusual preference, namely the signing of the Peace Treaty at Versailles. The Headmistress asked the girls which sort of film they would like to have regularly in school, ordinary picture-house films or films like "The World War and After"—"Honest Injun," they were adjured. All but one girl, who bravely said she thought the other films were more exciting, said that *in school* they would like films like the League film, for "It would really help us with our work."

Headmistress. You don't really mean you would rather see films on lessons than a film on Charlie Chaplin. Think again.

Girls. Yes, in school.

Investigator. Perhaps they don't like Charlie Chaplin. I believe grown-ups like him better than girls. I wonder if they like this film as well as one on Harold Lloyd.

Headmistress. Well, who are your favourite people on the films ?

Girls. Chorus of Greta Garbo, Pola Negri, Ronald Colman, Harold Lloyd, Corinne Griffiths, etc.

Headmistress. Wouldn't you rather have these in school, really exciting films, than lesson ones ?

Girls. In school, no.

Both groups thought the film helped them to learn history, IIIA. because they could not imagine scenes so clearly as the film depicted them, and because it was interesting to talk about the film afterwards, IIIC. because it was clearer than reading, and "We can get the order better."

180. **Experiment 57: The Written Exercise.** These tests were set:—

1. Write a letter to Miss Consitt thanking her for showing you the film. Tell her what you think of her way of teaching you history.
 - (a) What caused Austria to declare war against Serbia in 1914 ?
 - (b) Who joined Serbia ?
 - (c) Who then joined Austria ?
2. (a) Which country did Germany wish to attack in 1914 ?
 - (b) Which land did she wish to pass through ?
 - (c) Who declared war against her when she crossed this land ?
3. Give three reasons why you think war is wrong.

4. (a) When and where was peace signed ?
- (b) What was founded to prevent war in future ?
- (c) Name two places where its councils meet.
5. Do you know of any quarrels between nations which have been prevented from becoming wars ? Write a few facts about each case.
6. If you were asked to write a good essay and could choose one of the following subjects, which would you select and why ?
 - (a) The Seven Years' War.
 - (b) The Napoleonic Wars.
 - (c) The League of Nations.
 - (d) The work of the Gilds of the Middle Ages.
 - (e) Life in Early England.

The answers were marked and graded for grip and atmosphere in the usual way. In IIIA. the standard reached was high, but in general the girls took their usual position. In Question 6, the free choice test, 24 out of 29 girls elected to write on the League. "Because it isn't muddling, and it is very clear and particularly interesting." "Because I can understand it more easily than the other subjects." The letters strike the note of appreciation. All the 29 girls say they think the film way helpful. One fact was clear from reading the letters. These girls are evidently trained with considerable care by their history teacher to exercise their imagination, but they find it difficult. "When we learn history from teacher we have to make and collect our imaginations and make up our own pictures, but with the films we have the picture." Such remarks recur. It may be well for the child to make its own pictures, but these girls indicate the weaknesses of expecting too much in that direction from young scholars. One says, "What we imagine may be wrong." Some cannot keep pace with the teacher. "When a teacher is telling history, to really grip what it is all about you must try and imagine a picture, and by the time we have found out what it is all about we have missed the next portion of the lesson, which probably contained some important points." These girls, like most classes, were glad to see "the actual thing," the "real thing." They find the film convincing. "Seeing is believing," wrote one girl. Many say that it is easier to concentrate on a film than on an oral lesson. "Somehow it draws our attention, and our minds do not stray away from the subject as often is the case." Several suggest that the film leads to a more continued interest than the oral lesson; they talk about the film out of school hours. "When we see it on the films we can tell our parents and friends about it, and all the time we are remembering what we saw." Several girls say "It was a change," but one of them scouts the idea that it is the novelty that attracts. "I am positive we should never get tired of them because we never get tired of ordinary films." One opines, "I know it costs money, but I certainly think it is worth it."

The case is very different with Class IIIC. Their average ability was low, and they found much difficulty in answering the questions. Only 9 out of 24 gave the League as their choice in answering Question 6.

They prefer to write on something previously studied, for instance on the Gilds, "Because I know all about the Gilds." Question 3, "Give reasons why you think war is wrong," was well done; they have learned from the film, or been reminded by it, of the horrors of war. The answers to Question 5, on quarrels which the League has prevented from becoming wars, show that some in this class did not understand the analogies in the film. Five cite the garden dispute as an actual quarrel stopped by the League; one of these girls and one other quote the street fight. They have gathered little detail from the film. For instance, one answer to this same question is "When two countries quarrelled over some islands." This C class write pleasant little letters of thanks, but there is not the same conviction in them as in those of IIIA. that the film was a great aid. Ten make no comparative remark between the film and oral lessons. The other fourteen are pleased at seeing the "actual," like most backward classes.

The teachers thought that the subject, the speed of presentation, the length of the film were beyond the slower class. The report runs: "Class IIIC. have been taking earlier history in their ordinary lessons, and were incapable of grasping the subject matter of the film as compared with IIIA. In addition they are less capable of expression. . . . The speed was a little too rapid in some scenes. The film gave rather too much information for one lesson for the average class, although the breaks were good. If practicable, two separate half-hours would be better than one hour." The result with the c. form might have been different with a shorter, simpler film. All the three teachers who helped in the experiment, the Headmistress and the two class teachers, felt that the experiment showed that suitable films could well be used in their type of school.

181. Conclusions drawn from the Use of the League Film in Schools in Poor Districts. The League film proved within the scope of the brighter senior classes in these schools, but too difficult for senior groups containing many backward children or for younger groups. It would seem that the more purely pictorial type of film, like *Roman Britain* and *Wolfe*, better fill the general needs of these schools. All the teachers who witnessed any of the experiments felt that such films would definitely help in the solution of some of their problems of history teaching.

CHAPTER VIII

THE INFORMAL TESTS IN RURAL SCHOOLS

182. Need for Tests in Country Schools. Electrification of the countryside is proceeding apace. Soon it will be as easily possible to instal a cinema depending on an electric supply in the village as in the town school. In view of this fact it was necessary to test the cinema in country districts. Moreover, even in these days of cheap and quick "bus" transit, the country child has his special difficulties. He has the inestimable advantage of growing up near fields and woods and their wild life and in the midst of beauty, but his experience in other directions is necessarily more limited than that of the town child. He is somewhat cut off from the world of activity, from the museums, the libraries, the very shop windows that teach the town child much; he mixes with a very limited circle of people. It is clear that films might go far to remove the limitations imposed by environment. Hence, it was necessary to discover whether serious educational disadvantages attached to the use of films in country schools that would nullify their obvious advantage. The experiments in this chapter are grouped according to the schools in which they were performed, since work was only undertaken in three village schools. These were in each case in agricultural hamlets, not in villages of the semi-industrialised type.

Experiments 58 to 62 were made in schools in two Bedfordshire villages. In each school one experiment was taken with the upper, one with the lower classes. In each case, the experiment with the older scholars proved less successful than that with the juniors. Examination of the experiments will suggest possible reasons.

183. Experiment 58. Twenty-nine children saw the Wolfe film. Eight were from Standards IV. to V., 21 from Standards VI. to VII. Their ages ranged from 9 to 14, but most of them were from 12 to 13 years old. Only the oldest had made a formal study of the Seven Years' War, but all had had a preliminary lesson on the situation in North America before the attack on Quebec. The film was shown without comment, save on the maps and one or two indications as to which forces were operating.

The follow-up lesson was disappointing. The class was possibly shy, and it was certainly not sure of the story. Anson and Pitt, Montcalm and Vaudreuil were confused, actions of the English imputed to the French. So long was taken over elucidation of the subject matter by means of question and answer that the available time passed without the class being given an opportunity to voice their own queries on the film.

Very few questions came from the children during the lesson. A puzzling point arose when one boy expressed his opinion that the battle was "silly," but could not be prevailed upon to give his reasons. It appeared later that he did not believe that men had really stood in wigs and three-cornered hats and fired at each other at forty paces—another example of the effectiveness of films in bringing home to children the contrast between the usages of different centuries. The Headmaster wrote: "The answering was not as general as might have been expected, being supplied in most cases by the A scholars." It appeared, however, that there were some "visuals" in the class, since the teacher also noted five duller children who took a much more prominent part than usual in the oral lesson. Despite their perplexity over many details, the class was certain that the film had been a help. "We can see the actual people."

Teacher. Can't you imagine them, though, from ordinary lessons or from a book?

Answers. 1. Not so well.

2. It's a lot more real than reading.

Three written questions were set :—

1. What did you think of the film ? (3 minutes.)

All the children expressed themselves shortly and in almost identical terms. "I enjoyed the film very much because it was so interesting."

2. What did you learn from the film of the appearance, character, and work of any three of the following : Pitt, Anson, Wolfe, Montcalm, Vaudreuil ? (30 minutes.)

The Headmaster was disappointed at the answers to this question. He says, "The summing up of the chief characters seemed to present most difficulties, and answers were not full enough as a rule." Children, however, cannot write at much length either about character or personal appearance. The question was set to find whether the children after the lesson were able to differentiate the several leaders. The answers showed that this was certainly the case.

3. Tell the story of the film from the landing at the Foulon to the death of Wolfe. (50 minutes.)

The Headmaster's criticism runs: "In the next question the incidents were in most cases related in correct order, and in some cases in detail, but many did not take a broad view of the incident."

The grading showed little variation from normal. That is to say, the whole class had thoroughly enjoyed the film, but depended on the follow-up lesson to get the episode clear; a few duller children had been stirred to real interest and effort in the oral lesson, but on the whole the response both oral and written was merely average.

184. Experiment 59. 22 children aged 8 and 9 were shown the film on Roman Britain of which they had learned in class. Naturally, their knowledge was not detailed, and related to the Britons in 55 B.C. rather than in A.D. 43. In the talk before the film, they told me that the Britons lived in mud huts, wore skins, and were savages. They remembered the landing of Julius Caesar, and that later the Romans

came for a long time, when they made roads. Every help was given with the film. All the reels were shown, but a short talk was given the children before each, *e.g.* "This reel is about what the Britons were like when the Romans came to stay, nearly a hundred years after Julius Caesar. I want you to look at it very carefully so that you can tell me afterwards all about the Britons, what sort of villages they had, and houses and clothes, how they earned their living, how they were ruled, and anything else you can see." During the reels, attention was called to many matters. "Notice one hut different from the others." "Look at the bundle the attendant is carrying."

In the oral lesson, these little children were far brighter than the seniors. They had a break after the film, and later two talks, one in the morning of 15 minutes, another of 20 minutes in the afternoon. Most of them had missed little on the film and were anxious to tell what they had seen. They told their teacher with much excitement in the dinner hour, "The lady wants us to go and talk to her again this afternoon." The class teacher, who came to the afternoon lesson, said that the backward children replied better than usual, especially one boy, so poor a reader that he could get little from books. The Headmaster reported: "The response was good on the whole, several children who are usually very listless answered intelligently and well. This was particularly noticeable in the case of one boy who is graded D for general ability." All but two of these children liked the third reel best, because it was "exciting." One girl preferred the cornfield scene, "because it was pretty," and a boy the drawbridge, "because I didn't know there were slaves in Britain."

This test was set :—

1. What did you think of the film ? (All the answers were approbatory—the film was exciting, or interesting, or "I liked it very much.")
2. Tell me all you can remember from the film about
 - (a) The Britons before the Romans came in A.D. 43.
 - (b) A Roman town in Britain.
 - (c) Romans and Britons at war.

Parts (a), (b), and (c) were given separate lesson periods. A usual fault occurs in the answers on Reel I. The Headmaster noted: "In the answers to the first part many of the children confused the Briton of A.D. 43 with the Ancient Britons of the history book and lesson." The grading was little different from usual. Sixteen out of twenty-two children obtained their usual grade. Such variations as occurred were in line with those generally noted. Two A children drop to B+, but one B child also drops to C. Two children in C rise, one to B and one to B+, one in D to B. This last is the boy already mentioned as showing a much greater enthusiasm than usual in the oral lesson. His paper follows; the spelling has been corrected as in all papers quoted, but no other alterations made. It will be seen that this dull boy has learned much from the film :—

I very much liked the film because that showed us about the Romans.

(a) I am going to tell you about the Britons. As we were looking at the film I saw the Britons against their thatched huts. The Britons were sitting

on small sofas and had small tables to have their food. To get their food the men go hunting for the wild boar. In the picture it showed us a man with a spear in his hand, after the wild boar. In the picture it showed us the Britons in the cornfield, cutting the corn. The men were cutting the corn, and the women were taking it away in baskets. The women were weaving and spinning to make cloth. The women undo their plaits to show sorrow, and a man was playing a harp because the Britons liked music very much.

(b) In the picture it showed us a Roman town. We saw a market-place called a Forum. In the town they built a drawbridge which soldiers were to guard. The soldiers come up at night with torches to guard it. There was a deep ditch which was called a moat, to keep the enemy out. In the picture they showed us a large wheel which soldiers have to turn when their enemy is coming. In the picture we saw them lean on a small sofa, and a small table to have their food, and drink out of glasses.

(c) Now I am going to tell you all I can about the Romans and Britons. The Romans were trained very much for fighting. In the picture we saw the Romans on the march. The Romans had long spears and short swords. Some of the Roman soldiers carried their baggage on their sticks. Some of the Roman soldiers were on foot and some on horses. As they were on the march one of the Roman soldiers fell on the way and died. The Britons had chariots which had knives on the wheels. The Romans won because they were trained, and the Britons worsted."

The Headmaster's comment on the juniors' written test is: "In most cases this showed that the film had been watched carefully, and many details were noted."

185. Discussion of Results: Experiments 58 and 59. The joint results from the two classes and earlier knowledge of educational films made the Headmaster feel that there was a place for the film in school, and that the failure of the older scholars to grip the story of Wolfe fully from the film pointed, not to the negative value of the historical educational film, but to the presence of some factor operating against good results in this particular case. Discussing the matter in a letter, he says: "As I told you on the occasion of your visit, I am in favour of the cinema as an aid to the teaching of History, Geography, and Nature Study. It is, of course, difficult to come to a definite conclusion as a result of one experiment, but, judging from what I noted during the questioning by you, and after looking through the written answers, I am still of the opinion that the educational film has a great future before it—but the children must be taught to observe, not merely to see. I was more satisfied with the response and reaction from the juniors. Is it because the older children have had a surfeit (Yes, even in X) of 'blood-and-thunder' films? You will note how great was the emphasis on the actual fighting (in the Wolfe film): the spectacle as a whole was seen, but the details not grasped in most cases, and the cause and effect not connected." I would rather find the explanation of the confusion of the senior class, which was apparent in the lesson, either in the procedure adopted for the experiment or in the unsuitable nature of the film, since the results with

the juniors had shown that the method itself was not too quick or otherwise unfitted to these village children. Most of the children had seen the Wolfe film without previous knowledge of its subject matter. This procedure had proved successful in some cases (Experiments 41, 42, 43), but in the formal tests with scholars aged 12 to 13 the film had proved too difficult for proper assimilation at one showing. In general, children of this age need to know the story first or to be given films simpler than this on Wolfe.

186. Deferred Tests: Experiments 58 and 59. Deferred tests were taken six weeks later. In the senior group there is again little appreciable difference from usual grading. The traits usual in essays on Wolfe with children of 12 to 13 appear, prominence given to climb and battle, ignoring of French affairs; eleven of the twenty-nine mention Pitt's direction of affairs, but only seven carry on the story after the death of Wolfe. Amongst the juniors thirteen have their usual grade. Four A children drop to B and one to C; three improve, a B child to A, a C to B, and the boy quoted above still retains his position at B, as against a usual D for delayed tests. In these papers it was noticeable that the younger the child, the less was retained. The children in Standard II., aged only 8, have no clear, general impression of each part of the film. They can quite unconcernedly merge Roman town and British village into one settlement, with a forum in the centre and a Queen with two long plaits. The 9-year-old children make the differentiation. All write more of the Celtic village, the first and simplest reel, than of the rest. The forum and basilica are remembered in Reel II.; the children had been proud of the acquisition of these exotic words in the oral lesson; and the drawbridge has impressed them; the chariots are the favourite mention in Reel III.

187. The Final Report: Experiments 58 and 59. The Headmaster wrote, "My impression is that the films were successful in their aim, this being particularly evident in the junior section." The formal report runs: "I find that on the whole the essentials are remembered, especially as no revision was taken. In both divisions there is some improvement in the results of a delayed test. I find that the more spectacular parts of the films, especially in the senior division, have impressed themselves more firmly on the minds of the children. I am firmly of the opinion that such films are of real educational value." To this is added a rider that the delayed report should be read in conjunction with the first, which the Headmaster does not wish to modify.

188. Experiment 60. Somewhat similar results were met with in the second rural school. Here the Wolfe film was shown to 25 scholars whose average age was 12 years 3 months. The class had very little knowledge of the subject matter of the film, which comes in the third

year of the senior scholars' three-year course. Most of the children, however, had learned of the taking of Quebec in story form two years previously. The few older pupils, who were spending a second year in the topmost division and had studied the Seven Years' War in detail, had noticeably learned most from the film. All these children were intensely thrilled with the picture, which was shown to an excited commentary of "Ahs" and "Ohs," but again the oral lesson elicited the fact that the details of the story had not been clearly grasped. The scholars looked at the investigator throughout the lesson as though they were thoroughly interested; they seemed to be following the unfolding argument; yet it was most difficult to persuade them to talk. The Headmaster said that after the first shyness the response was above the average from the backward children. Several dull boys had answered odd points, one markedly backward boy having observed, for example, the French method of crossing the Charles River by a bridge of boats. The Headmaster thought that confusion between characters might have been avoided by a preliminary lesson. He regretted that the class had not been encouraged to ask questions before any were put to them, since there was so much in the film entirely outside their experience. This might have been the better plan; it was one frequently adopted; but it was found that, except with naturally self-confident children, questions came more easily from the class when some preliminary discussion had established friendly contact between scholars and experimenter. In this case, we were again so busy getting the story clear that the period was at an end before we were aware, and no "question time" had been allowed.

189. Headmaster's Opinion on Value of Film for Country Scholars:
Experiment 60. The Headmaster wrote afterwards that the interest created had been lasting and the class had asked many questions on the film in the ensuing weeks. At the time, he pointed out how difficult his pupils found expression not only in writing but in speech; their vocabulary was limited. He thought their slowness in answering on the film lay largely in their lack of power quickly to translate the picture in their minds into words. From this aspect, the film imposes greater effort on the child than the oral lesson. The teacher thought that from the point of view of speech-training the film method was of value for country children, since it gave an abundant supply of material which they would be interested to try and describe in words. At the same time, the visual method of presentation made history easier for them to learn. "Scholars like the method since they can remember what they have seen. The language difficulty does not stand in their way. The picture makes them want to understand. It loosens their tongues and leads to much questioning." Further, he thought that films brought vividly to country children a sense, very necessary to inculcate, of being part of a larger world. Again, he expressed the view that good films made by specialists would be invaluable to the non-specialist teacher. He had learned much himself from the film, details such as the method of scaling the Heights,

the distance of the battlefield from the place of landing ; such things could not be known save from the reading of detailed works or original sources.

190. Written Tests : Experiment 60. The test used in Experiment 58 was again set. Unusually, the written work shows better what the children have gained from the film than did the oral lesson. Naturally, the 45 minutes' lesson had clarified many matters for the class ; collaboration of film and oral lesson has achieved results far above the ordinary. Some scholars are still confused between Montcalm and Vaudreuil, between Anson and Pitt, but, on the whole, as their Headmaster wrote, " Their attempts at character interpretation are most interesting." There is a certain shrewdness in their laconic appraisements. " Vaudreuil was a tall man of a jealous character, and was always putting things off." " Montcalm was not very tall, but determined." " Wolfe was weak in body, but strong in mind." Pitt " managed things." Anson remains something of an enigma to them, but little more could be gathered of him from the film than this description, " Anson was jolly in character, and he was short in appearance, and he worked in the British Navy." The Headmaster remarks : " Interest centres chiefly in Wolfe, who is one of the children's heroes ; they appreciate Wolfe more than Pitt, since Wolfe did things which they can understand." Evidently the children have quite a clear picture of Pitt in their minds, but cannot attach meaning to his actions. He has some connection with the sea, for he talked of the navy and looked at a model of a ship. Hence " Pitt designed the ships while Anson looked after them." He handled papers on his desk, so they infer, " The work of Pitt was to see that all the papers about war and sieges were kept in a proper place." He showed Anson a map, so we read, " Pitt had to study maps to see where England and France had land." Some children do better, one especially who writes, " Pitt's work was to plan out what to do, which way to go." The mistakes would not have occurred if the children had followed the sub-titles giving the conversation between Anson and Pitt. It appears that these captions are too long for children, nor is it clear from them who is speaking. The descriptive question was done well, as was the free delayed test, taken six weeks after the film-showing.

191. Grading of Written Tests : Experiment 60. Contrasting the results of both written tests with those usual, the Headmaster writes : " The A group invariably maintained standard. It is interesting, however, to note that our most brilliant essay writer ——— did not sparkle as she usually does. *She* evidently finds it easier to recall language than to recall visual images. The A—B¹ group maintained standard except in the case of ———, a particularly nervous boy. The B—B group maintained standard, and many of them reached A standard when style was ignored.

¹ The first and second letters refer to the usual grading in immediate and delayed tests respectively.

The most striking results are to be found amongst lower ranks. One boy moved from D—C group to A group. Two others showed striking improvement, moving from C to A. I feel that these backward scholars need the picture method since the 'language path' is full of difficulties for them."

EXPERIMENT 60 : IMMEDIATE TEST—24 PUPILS

Same Grade, 9.	Higher Grade, 14.	Lower Grade, 1.
6 in A 2 in B	3 B to A 6 B to A— 1 C to A 1 C to A— 2 C to B— 1 D to C	1 A to B

EXPERIMENT 60 : DELAYED TEST—24 PUPILS

Same Grade, 10.	Higher Grade, 14.	Lower Grade, 0.
4 in A 6 in B	5 B to A 1 B to A— 2 C to A 1 C to A— 3 C to B 1 D to A 1 D to C	

192. **Experiment 61.** 35 children in the same school aged 9 years 6 months were shown the films "People of the Axe" and "People of the Lake." They had had lessons on both the Stone and Bronze Ages. Comments on the scenes were given as the film went through, the film being stopped in one or two places when explanations seemed advisable. This was done, for instance, at the first picture of the lake village, to explain how only such settlements were made. The films were shown towards the end of morning school. As a few minutes of school time remained when the films were done, the children were asked then and there if they wished to ask any questions about the films. Several were immediately raised :—

1. Were they digging especially for skeletons ?

This point had been explained during the film, but not properly grasped.

2. Did they wear trilby hats in the Stone Age ?

This was a perfectly genuine question from rather a dull child. The Professor who is excavating wears a hat of this description. The

question, like the first, instances the fact that young children do not readily understand the picture of the barrow and are confused by the introduction of a modern scene into a film on an earlier age.

3. Did they have a house each in the Stone Age ?

This question was also raised during one of the formal tests. The pit dwellings are small, and Fleet is shown alone inside the hut. The children wonder where his parents are.

4. What were the houses made of in the Stone Age ?

This child had read some description of a round, mud hut, which did not tally with the picture on the screen.

5. Did they always eat with their fingers ?
6. Was there a pit under the branches to catch the deer ?
7. Did the pedlar come from other lands ?
8. Did Fleet's father have to give all his skins for one axe-head ?

Of the second film they asked :—

1. Was it a moat round the lake village ?
2. Did they ornament the pots with men as well as with lines in the Bronze Age ? (The child had seen pictures, as far as could be gathered, of Greek pottery.)
3. How did they light their fires ?
4. Did they kill the boy they lassoed ?
5. The helmets of the Bronze Men were like Viking helmets, weren't they ?

The teacher's comment is : " Many intelligent questions were asked at the conclusion of the film-showing, proving that interest was aroused and discussion provoked."

Thirty-five minutes were spent in discussing the films in the afternoon. All the children had enjoyed them. " It was more interesting than a history lesson." " We saw the actual things." " It was more real." All the class was agog to answer questions. The method adopted was to ask, " What came first on the film ? ", discuss the answers, and pass on to " And what next ? " The Class Teacher said that the dull children were more responsive than usual. Two mentally retarded boys answered questions correctly, and " Several questions obtained 35 hands in response." The teacher said that the children had got the sequence of the films far better than she had herself. In the first film some liked best the scenes of the deer in the park land. " It was pretty." Often little ones give this reason for their preferences. Many liked the part showing Fleet hunting the deer, the feast, the after-supper stories, or Fleet getting up, yawning and stretching and crawling from the hut. In the second film all voted for " the fight."

The class wrote charming, childlike essays on the films. One child said to the teacher while writing, " This composition is easy because there is so much to write about." The result for the whole form is more or less average, since 16 obtain their usual grade, 6 deteriorate, and 10 improve. Amongst those who do worse than usual, two fall from A to B, one from B to B—, two from B to C, one from D to D—. Many of the

weak are helped by the film. One rises from B to A, one from C to A, four from C to B, four from D to C. The complete analysis is :—

EXPERIMENT 61: IMMEDIATE TEST—32 CHILDREN

Same Grade, 16.	Higher Grade, 10.	Lower Grade, 6.
7 in A	1 B to A	2 A to B
7 in B	1 C to A	1 B to B—
2 in C	4 C to B	2 B to C
	4 D to C	1 D to D—

The teacher writes of this first test : “ In grading, the age of the child was considered. No child remembered all the facts taught, but many remembered quite a fair percentage of the total. Facts were rarely given in their wrong age. Several days elapsed between the film-showing and the reproduction of the stories, so the first vividness was somewhat dimmed, yet every child retained something of the atmosphere and spirit of the time.”

The delayed test was taken ten weeks after the film-showing. Both films were remarkably well remembered. In writing of the Stone Age most of the main points in the film are mentioned, but the children remember particularly those things which Fleet himself performed. When the children write of the Bronze Age, the film as a film is remembered, but the children think in terms of the Scout as did those concerned in the formal tests, so that not so clear a picture is given of the Bronze as of the New Stone Age. More information was given by some pupils in the second than in the first test. The general level reached was higher than that usually obtained by these children in deferred tests. Sixteen reach their usual grade, five do less well, and twelve improve. The analysis follows. It is to be noted that the duller children have remembered the films well. Five rise from B to A, one from C to A, one from C to B+, and three from D to C+.

EXPERIMENT 61: DELAYED TEST—33 CHILDREN

Same Grade, 16.	Higher Grade, 12.	Lower Grade, 5.
6 in A	5 B to A	1 A to B
6 in B	1 C to A	3 B to C—
4 in C	3 C to B+	1 C to D—
	3 D to C+	

193. **Report on Experiments 60 and 61.** The Headmaster, commenting on both experiments with his scholars, wrote : “ It seems quite plain to me that the results obtained are better than usual, and that the

picture method has proved most effective." Remembering certain weaknesses in the oral lesson and written answers, he added : " Just as scholars have to be trained to hear wireless lessons, so they will need training in seeing a film to the best advantage. Many scholars seem to recall only that which is exciting ; the dramatic moment appeals too strongly ; they need definite training even in seeing a film."

194. Further Tests with Senior Scholars of a Rural School. In neither case had the first, oral response been very satisfactory from the senior scholars in these two rural schools. It seemed essential to show other films to such children, to test the impression, derived from the evident interest of these older children, and from the much improved written work in the second case, as well as from the good results with the juniors, that the film method was of value in the upper standards of country schools, and that the disappointing oral response in the follow-up lessons was due to employing either the wrong film or the wrong procedure. It was possible to spend a week at a country school in the East Riding of Yorkshire. Special thanks are due to the Headmaster of this school, who surmounted many inconveniences to make the tests possible. There were only 66 children on the school roll, and only two classrooms, the Infants using the smaller room. Since it was impracticable to use the Infants' room, all the scholars in the upper school had perforce to watch the films, but follow-up lessons and tests were taken only with the 18 scholars of the senior group, which was made up as follows :—

Standard VII.	4	Average age of group 12 years 1 month.
.. VI.	2	
.. V.	6	
.. IV.	6	

195. Experiment 62. On the first afternoon, Reel I. and Reel III. of " Roman Britain," " The Britons at Peace " and " Romans and Britons at War " were shown. The subject matter of Reel I. was not new to the class. Standards VI. and VII. had learned about the Britons during the Roman occupation, but a long time previously. The class as a whole had recently read about the period in the " Piers Plowman Junior History Readers." A short talk preceded the film and preliminary questions, to discover what impressions the children already had. They gave information on the shape and material of the Britons' houses, that the Britons in A.D. 43 were mainly a farming people, that they wore skins. They were reminded of Caesar's invasions, the interval before the conquest in A.D. 43, the long period of Roman occupation. They were finally asked to discover from the first reel every possible detail about Celtic life on the eve of the Roman conquest. The reel was shown with very few comments. The Chief's house was pointed out, the distaff and spindle, the Druids on their successive appearances. The class talked to each other about this reel while Reel III. was threaded. They were told to find from the coming reel the equipment and general arrangements of

each army, and why the Romans won. This reel was accompanied by much oral commentary. Several stops were made. One occurred at sight of the Roman soldiers on the march to point out general features of their accoutrement, the helmet, cuirass, shield, javelin, and sword. The children were told to notice the details of these as the film passed through. The film was stopped in three other places, to talk about the kit of the soldiers, the parts of the helmet, and of the cuirass.

In the follow-up lesson it appeared that about one-third of the children, including most of the boys, liked the last reel "because it was about war." The others, with the majority of the girls, preferred the first part. "We can see how the people lived in our own country all that time ago." They were chiefly interested in the pottery and basket-making and the spinning, scenes of constructive action. Many also remarked on the women unbinding their hair—the appeal of the spectacular. Of the lesson the Headmaster wrote: "They had understood the subject matter well and were eager to talk about what they had seen and to discuss the film. It was evident from their questions and answers that the people of Britain became real living people to them. The response was generally excellent, a marked improvement on their usual response. Even the duller children were eager to join in the discussion and say what they had seen." The children answered well both the simple questions on detail of the film and those demanding more thought. Some of the questions that came from the class are:—

1. How did that man finish off the top of his baskets?

This, from one of the youngest children, is an example of the film's power of awakening intelligent curiosity. The basket-maker is weaving willows in and out of the uprights and has only reached half-way up the side.

2. Did they make their corn into flour? How?
3. Did all the people use gold cups or only the Chief?
4. Where was the Chieftainess going in the chariot? Did she fight in the battle?
5. Did they go to the battle in the chariots?
6. What were the Roman spears made of?
7. Why did the chariots ride up to the enemy and go away again without doing anything? (A usual query.)

The children wrote an essay on whichever reel they preferred. An analysis of the marks for all the tests is given at the end of the description of the week's experiments. The Headmaster's comment on the first test is: "The written work on this film was without exception very good indeed. The amount done showed a much greater flow of ideas than usual; much more was written in a limited time (40 minutes) than we generally get. The atmosphere of their written work showed most clearly that the subject matter of the film lived for them." He appends a note on age variation. "The amount of written work in the case of some of the younger children was slightly less than might have been expected. This, however, is due to the age average of the class, 8-14. The 8-year-old

child has not the same mechanical facility with a pen as the older children. Even the youngest, however, have done larger quantities of written work than usual. All the children noted down a high percentage of the facts."

196. **Experiment 63.** It had been observed in earlier experiments (*e.g.* Experiment 35) that Reel II. of "Roman Britain" was often less well realised than Reels I. and III. This might partly be because it was frequently the middle or end reel of three shown. Hence, this reel on the next day was shown alone. It was related to the films seen the day before by a preliminary talk explaining that when the Romans had conquered Britain this was the sort of town that developed in the quiet south-east. Many comments were given while the film was being shown, and one or two stops made.

When the film was over, the children were given an opportunity to ask questions. Was there anything on which they were not clear or about which they wanted to know more? These are the questions:—

1. Had the message come from Rome?
2. Where were the prisoners tried?
3. How were they punished?
4. Were all the people in the hall of the basilica, Romans?
5. What instruments were they playing at the feast?
6. What were the statues made of?
7. To whom were they signalling?
8. Would the Britons be allowed to guard the town, because it was a Briton in the watch-tower? (Another common query.)
9. What were the torches made of?
10. What were the bridge and towers made of?
11. What is the name of the thing holding the fire? (A brazier.)

When these difficulties were removed, the class was given this short-answer test without further discussion:—

1. What encircled a Roman town (besides the moat)?
2. What was built to enable people to pass over the moat?
3. From what were the signals made at night?
4. How were these made?
5. What was used instead of a carriage?
6. Who acted as police in a town in Roman Britain?
7. } What two garments were worn by a Roman?
8. }
9. How was the rank of a Governor shown in his dress?
10. Of what was the bundle carried by the Governor's attendant composed?
11. What building in a town to-day corresponds to the basilica?
12. On what did the Romans write their letters?
13. Where did the Romans go to meet and gossip with their friends? (Baths.)
14. On what sort of seats did they have their meals?
15. How was the drawbridge raised at night?

The children knew these details well. The average mark was 13 out of 15. A discussion lesson of 20 minutes followed with intent to build up a picture of Roman Britain round the film. Later in the day the children wrote a free essay on the reel. The Headmaster noted: "The

response of the children was exceptionally good. The class as a whole were very much interested, and this was proved, not only by their ready response to the oral questioning, but much more so by their unusual readiness to ask numerous questions. There was a lively discussion of this film. Their written work was of a very high standard, much more explicit than usual. The facts had been well noted ; a high percentage of facts was noticed by each child. The quantity of written work was highly satisfactory and was a distinct advance on their usual work."

197. Experiment 64. It was decided to show this class the Wolfe film, though again they had made no formal study of the Seven Years' War. The class was prepared for the film by a talk on the relations of the English and French in North America. The film was shown with far more oral comment than before. It was stopped at the study scene, the work of Pitt and Anson briefly indicated, and the children told "Pitt is explaining his plans for conquering North America. Notice what he says about the navy." It was again stopped when Montcalm and Vaudreuil are first seen together. "Be sure you have these clear. The tall man is Vaudreuil. He was a French-Canadian, born in Canada and now Governor-General of Canada, always there in peace or war. The short man is Montcalm, newly sent out from France to command the French forces in this crisis." A pointer was used to explain the maps. Much indication was given, at points proved confusing to children in the earlier lessons, as to which were the forces operating. "These are French holding the Samos battery, though their uniform is dark." The film was again stopped for the last sub-title emphasising the sword metaphor to be read aloud.

This policy was justified by results. The half-hour's discussion lesson showed that the children had the story perfectly clear. A full hour was allowed for the written test.

1. What was the cause of the quarrel between England and France in North America ? (10 minutes.)
2. How did the following help England in the struggle : Pitt, Anson, Saunders, the Navy ? (15 minutes.)
3. What were the results of the struggle ? (5 minutes.)
4. Tell the story of the film from the raising of the lanterns to the main-top shrouds to the end. (30 minutes.)

The Headmaster wrote : "In the case of this film, the subject matter was entirely new to the whole group. It is quite evident that this film was of great use to the children, for, although the subject was new to them, they received from it a good idea of the situation in America both before and after the fall of Quebec. They appeared to grasp well the importance of sea-power in the great struggle, a point which was very clearly illustrated in the film. The response was particularly good. All the children answered well. Their work was much better than normal. The fact of Wolfe providing the main theme of the film enabled them to follow it better and keep the various incidents in mind. The film stimu-

lated interest and called forth much discussion. There was a very great quantity of questions asked about this film. Here also the class as a whole joined in the discussion. The class was particularly interested in all portions of the film depicting Wolfe. The signal by means of lanterns from H.M.S. *Sutherland* was a point of special interest to all the class. Great interest was shown in the battle scenes, and again in those showing the two parties waiting for the first boat in the next spring. The children were much pleased with this film also, and were quite satisfied that the picture had been the means of giving clearer ideas of the events of that period. The written work was again better than the normal."

That is to say, the Wolfe film had quite successfully been used as an introduction to detailed study of the Quebec campaign, an attempt not too successful in Experiments 58 and 60 in the two previous rural schools. There it was necessary in the following lesson to make good many omissions in observation and to remove much confusion. This film needs much accompanying oral commentary from the teacher to be used successfully as an introduction with the country child.¹

198. **Experiment 65.** Finally, the revised version of "The World War and After" was shown to the class, with the omission of Part III., which deals with the constitution of the League. Otherwise the Headmaster, who had seen the film, felt that it would be too long and difficult for the younger members of this composite class. Before the film the class had a 20 minutes' preparatory lesson. 15 minutes were spent in explaining the causes of war; in the last 5 the children were told that the war had left terrible results; these they would see on the film. Consequently, a feeling grew that there should be some machinery to prevent future wars. So the League of Nations was formed. They would find out from the film how the League came into being and how it worked.

The film was shown in silence. Afterwards, 45 minutes were spent in talking of the film. The children had grasped the cause of the struggle remarkably well. Asked for the results of the war, without further prompting they gave all those shown on the film except those connected with the shifting of frontiers and the formation of new countries. These were easily elicited by one or two further questions. The children were not quite so prompt with explanations of the method by which the League settled disputes, but answered leading questions readily, and had obviously grasped the principle of arbitration. The children liked the pictorial parts of the film better than the diagrams. They most enjoyed the quarrelling neighbours, the street fight, the scenes of devastation in Europe after the war, the garden dispute, the people working in the Aaland Islands, the clock in the last reel. But they found the maps "interesting."

¹ In Experiments 24, 41, and 43, paras. 133, 157, 161, the film was used successfully as an introduction with city children, with only the little oral help also given the country children in Experiments 58 and 60, paras. 183, 188. In Experiment 42, para. 159, which actually took place the week after Experiment 64, the same help was given the town children as in this case.

Teacher. Which do you like better, ordinary maps or those on the film ?

Answer. The film maps (chorus).

Teacher. Why ?

Answers. 1. They are clearer.

2. They are easier to understand.

Teacher. Why ?

Answers. 1. There isn't so much in them.

2. We can remember the map where one country was darkened at a time.

For a written test the children headed their papers, "What I saw on the Film and what it taught me about—

1. The Causes of the War ;

2. The Results of the War ;

3. How the League prevented Quarrels from growing into Wars."

The children were given 20 minutes on each section, and produced full answers on all points. Two things were noticeable about their answers to Question 1 : first, that the bright and average children ably combined what they heard in the preliminary talk on the causes of the war with what they saw on the film ; and in the second place, that even after a discussion lesson the younger and weaker children confused the street fight and garden scenes with real events. In answers to Question 2 the chief omission, as in other experiments, is any mention of the changing frontiers. From the replies to the last question it is evident that some of the duller children identify the Council of the League with the English Government, who send out commissioners to enquire into disputes. No doubt this last misapprehension was partly due to the omission of Part III. wherein the organisation of the League is explained. Generally, these children thoroughly understood the representative nature of the League and its method of work. Paper 1 is from an A child in Standard VII., Paper 2 from a C— child in Standard V. Both children are aged 12.

199. Paper 1 : Experiment 65.

THE WORLD WAR AND AFTER

What I saw on the Film and what it taught me :—

1. *About the Causes of the War.*—One cause which started the war was the heir of the throne of Austria had been murdered and Austria wanted to fight Serbia so they said Serbia had done it. They said they would make war on Serbia unless it did all they told them. Serbia gave in to all points except one, which was to let Austria look at all the secret papers of the Serbian government. Austria really wanted to fight Serbia so they could make a passage through to the Aegean Sea. Serbia would not let Austria do this one thing. So Austria declared war. Germany went on Austria's side, so Russia went on Serbia's side. Then Germany made to attack France, who had come on the side of Serbia, and the Germans marched through Belgium, which they had promised they would not. So Britain sent to stop them, but they would not, so Britain declared war. Thus almost all the nations in Europe were entangled in the war. The heir of Austria was killed in 1914. All nations were waiting for a chance to fight so they could get more lands. They were all jealous.

2. *About the Results of the War.*—All the lands of Germany and Poland and Belgium and France were ruined. No crops were growing and a large part of Europe were starving, besides the houses and famous buildings being destroyed. Many millions of men were killed. Nine million men were killed and many more. It cost a lot of money and Britain had to borrow off America. Many millions of men were crippled and maimed for life. Others were blinded. The blind were taken about by others. Many were gassed and not able to do ordinary work like other men. Poland, Germany, and France, which had been beautiful countries with lovely crops, were desolate. Many beautiful houses and villages were destroyed. Then in England it left a large debt to be paid to America, who made bullets and ammunition for England. The war ended in 1918, on the eleventh day of the eleventh month, November. On that day we always have a service and think of all the men who were killed in the Great War.

3. *About how the League prevents Disputes from becoming Wars.*—The League of Nations have prevented ten disputes which might have ended in wars. One which I know well was between Sweden and Finland. They disputed over some islands which lay between them. The islands were called the Aaland Islands. The people on the island were hay-making, and some men fishing. Some women were feeding calves and lambs. When the League heard of the dispute they gathered together and hurried to Paris, some by train and some by aeroplane. When they had discussed it all, the League men sat at the table with Sweden and Finland at each end. Sweden told her story and why she wanted the islands and so did Finland. Then they went to the Council and they decided the islands were Finland's but the people of the islands were to be self-governed. They settled another dispute which was between Greece and Bulgaria. One of the sentries had been killed and the other people said the other side had done it, so they declared war. They marched troops, to be prepared for the fight. Before the League of Nations settled the quarrel between Sweden and Finland, the men of the League went and interviewed people of all classes in both countries. The League sent word to stop sending troops and they went to Paris. The men of the League went and interviewed all the people in all classes in both countries as they did before. Then they settled the dispute. Before the League had got to the countries, some bombs had been dropped and they had begun. They went over as fast as they could before any harm was really done. Thus they stopped a war and since the Great War they have stopped ten disputes which might have led to a great war. Now all the nations of the world are trying to prevent wars by thinking things over. As in a village two men dispute over a piece of ground, they almost begin fighting over it. Then a fair-minded neighbour comes up and he measures the ground and shares it between them, and then they both begin to dig on their ground and shake hands and be friends. All this ended through a fair-minded neighbour. So like him is the League of Nations.

200. Paper 2: Experiment 65.

THE WORLD WAR AND AFTER

What I saw on the Film and what it taught me

1. *About the Causes of the War.*—One of the causes of the war was that the heir to the throne of Austria was murdered, and they said that some one in

Serbia had murdered him. They said, "If you do not do what I want you, we will fight you." Austria sent to the King of Serbia a long strip of things which they had to do. They said that they would do everything but one, and that was this. They had to allow some of their men to go to Serbia and look in all the secret papers to see if they had any papers about this murder. But Serbia said, "No, we will do everything but one, and that is we will not have you look in all our papers." Austria was jealous because Serbia had a way to the sea and they had not, and they wanted to claim Serbia so that they could have more trade and more land and colonies. Serbia was a very little country and Austria was three times as large. When Serbia said, "No," Austria said, "Well, we will declare war." Some went on one side and some on the other side.

2. *About the Results of the War.*—The results of the war were that there were no corn and no food and the people were starving of hunger, and they had no homes to live in, and they had to live where they could. Poor people had to go round and beg food. The trees in Paris were blown up or the top branches blown off, and the trunk left. The farmers lost sheep, and cattle, and fields, and buildings. They also spent £700,000,000 in the army and food and other things, which they require. Beautiful buildings were left in ruins and many people were killed and crippled and blinded, and the hospitals were crowded. Near by every hospital was a large field, where they buried the people which died in the hospitals from the battlefield. Millions of men and some women were brought home in chairs. Some were shell-shocked.

3. *About how the League prevented Quarrels from growing into Wars.*—If two countries wanted the same land and they were quarrelling about it, the League of Nations had to prevent them from fighting for it. They went and sent soldiers to ask about it, and what they think, and when they have asked they go and tell the government and they say who should have it. Then there had to be no more said about it. For instance, Greece and Bulgaria both wanted some land, and if the League had not stopped them, there would have been a great war again. Sweden and Finland were fighting.

201. **Report: Experiment 65.** The Headmaster reported:—

"(1) The subject matter was entirely new to the class.

(2) (a) The film, although difficult for children of this age, did prove useful to all of them, *e.g.* the shifting boundary lines on the map of Europe, did most certainly fix and impress these great changes on their minds.

(b) The response of the class was good; much better than in the case of an equally difficult subject taken by other, usual methods.

(c) The children were much interested—all the class showed great and sustained interest in this film. Their discussion was very complete in its touching upon all the main facts portrayed on the film. All the children had a part in the discussion—this is not usual with ordinary methods, as the duller children do not respond so well.

(d) Particular interest was shown in several parts of the League film—a list of some is here shown:—

(i) Changing boundaries shown on the map.

- (ii) Map showing routes taken by the League delegates and those showing the disputing parties reaching Geneva.
- (iii) Great interest in the method of showing lapse of time in the crisis between Greece and Bulgaria.
- (iv) The amount spent on the war came in for special notice.
- (v) The large cemeteries.
- (vi) The wounded soldiers.
- (vii) The haymaking on the Aaland Islands, etc., etc.
- (e) The scholars themselves thought this film both interesting and instructive, and said that they could understand the causes of the war from seeing the film.
- (f) The written work on this film was of a high standard and compared most favourably with their usual work. Despite the difficult nature of much of the material, their answers showed they had learned it well."

202. **Immediate Tests: Experiments 62-65.** The following table gives the marks of 17 of the children for the four essays. One boy had injured his hand and could not write.

IMMEDIATE TESTS: EXPERIMENTS 62-65, IN A RURAL SCHOOL

Scholar's Number.	Standard.	Usual Mark in Immediate Test.	Experiment 62. Reels I. and III., "Roman Britain."	Experiment 63. Reel II., "Roman Britain."	Experiment 64. "Wolfe and Montcalm."	Experiment 65. "The World War and After."
1	VII.	A	A	A	A	A
2	"	A	A	A-	B+	B+
3	"	A	A	A	A	B+
4	"	A-	A	A	A-	A-
5	VI.	B-	B+	B	A-	B+
6	"	B-	A	A	B	B+
7	V.	B	B+	B	A-	B
8	"	B	A	B+	B-	B-
9	"	C+	B+	B+	B-	C+
10	"	C+	B+	B+	B	B+
11	"	C+	B+	B	B+	B
12	"	C+	B+	B	B	B+
13	IV.	B	B+	B+	B	B+
14	"	B	B+	B	B-	B (+?)
15	"	B-	B+	B+	B+	A-
16	"	C+	C+	C+	B-	C-
17	"	C	B	B+	C+	B-

Although in all the tests there is an appreciable raising of the standard when the class is taken as a whole, the improvement is most marked with the simpler reels of the first two experiments. Scholars 14 and 16 benefit least from the film; they were aged 8 and 9 respectively, much the youngest pupils in the group. Their results may be partly due to inability to write quickly, since in the delayed tests ¹ they improve upon their usual average. The papers of Scholar 2 are interesting. She does less well than usual in Experiments 64 and 65. She writes vividly but with little regard for sequence. Her delayed results are better than her average ²; the short-answer test did not discover the weakness in her reaction to the film like the essay, or she may meantime have organised her knowledge.

203. Discussion with Class on Week's Work : Films preferred. The week's work was closed by a general discussion with the class. In talking of which film they preferred, 13 out of the 18 declared for "Wolfe" as being the most exciting. Of the rest, the youngest girl liked the first reel of "Roman Britain." She said, "I liked to see how they did the things we do," and when pressed further, "I liked to see them working in the cornfield and what their houses were like, and I liked best making the pottery." Four, three girls and one boy, preferred Reel II. of the same film. One girl gave as her reason: "It was all so new. I never thought of the Romans living ordinary lives. I just thought of them being soldiers and ruling"—again the film's power of making the people of history human beings, not abstractions. Another girl said, "I liked the basilica being like our churches." The boy had been interested in the working of the drawbridge.

204. The Film was more realistic and helped Imagination. All were convinced of the helpfulness of films in learning history. "It seems more true." "People seem real." They were asked if they could not really imagine it as well from reading if they tried. The class considered that they could not imagine things very well when they read their history books by themselves; it was easier when their teacher read to them. This suggests that the language difficulty engrosses attention to the exclusion of true realisation of the scenes described. Even when the teacher read to them or talked to them they could not imagine things so clearly as they were shown on the screen. The brightest girl in the class volunteered the statement that films helped them to imagine, because, after they had seen one film in any period, they could imagine all the other scenes for that time very well. "The people seem more alive to you, and you know about their homes and dress. You seem to get more from ordinary history books and pictures after you have seen some films." The class, though less fluent in expression, obviously approved of her remarks. Evidently, for these children, the film had made the pages of

¹ *Infra*, 207.

² *Ibid.*

their history book live, as not before. The film, wisely used, does not atrophy but fosters the child's historical imagination.

205. Method of using Film. The most helpful way of showing the film was discussed. These children liked occasional comments, for they made the picture clearer, and they thought it useful for the film to be stopped from time to time for the examination of interesting points. "Though it wants to be done in the right place," said one boy. It appeared that he would much have objected to a stop in the middle of the battle at Quebec.

206. Delayed Tests: Experiments 62-65. Two months after the original experiments, the class replied to the short-answer tests given below :—

I. TEST ON "ROMAN BRITAIN." REEL I. A.

The Britons at Peace

1. What was the outside of the house of a British Chief like ?
2. Describe the other houses in a British village.
3. What encircled the village for a defence ?
4. How did the Britons harvest their corn ?
5. What animal did they hunt in the forest ?
6. How did they make their baskets ?
7. How did they make their pottery ?
8. What work did the women do indoors ?
9. What was it like inside the Chief's house ?
10. How did the British women show their sorrow at the death of a Chief ?
11. What were their priests called ?
12. Say what they did at a religious service.

II. TEST ON "ROMAN BRITAIN." REEL II. B.

1. Describe the Roman toga.
2. What ornamented the toga of a person of high rank ?
3. What surrounded a Roman town in Britain ?
4. How was the drawbridge raised or lowered ?
5. How did they signal to the next Roman town ?
6. Describe the inside of a Roman basilica or town hall.
7. What was the name of the market-place ?
8. What was there round the market-place ?
9. How did wealthy Romans get about the town ?
10. What did the Governor's attendant hold in his hand ?
11. What did this mean ?
12. Mention anything which happened in the town hall.
13. In what position did the Romans eat their meals ?
14. What were their tables like ?
15. In what building did the Roman men meet and enjoy friendly talk ?

III. TEST ON "ROMAN BRITAIN." REEL III. C.

1. Were most of the Roman soldiers on foot or on horseback ?
2. Was the General mounted ?
3. What happened to any who fell out on the march ?
4. What were the Roman soldiers' chief weapons ?
5. Who acted as police in a Roman town in Britain ?
6. Mention any formation the Romans used to take.
7. How did the Britons begin an attack ?
8. Describe a British war chariot.
9. How were the Britons armed ?
10. Whose troops were the steadier in battle ?
11. What did the Romans carry for a flag ?
12. Who accompanied the British soldiers to battle ?
13. Why did they come ?
14. How did the Roman soldiers carry baggage ?
15. What surrounded the nightly camps of the Romans ?

IV. TEST ON "WOLFE AND MONTCALM "

1. What two nations were fighting to possess North America ?
2. Name the British statesman who controlled all English affairs.
3. Who was at the head of the English navy ?
4. Who was commander of the English army ?
5. Who was Admiral of the English fleet that sailed to Canada ?
6. Who was the French Governor of Canada ?
7. Who was in command of the French troops in Canada ?
8. On what town was the chief attack of the English made ?
9. Describe its position, showing why it was strong.
10. Up what river did they sail to the attack ?
11. What was the name of Wolfe's flag-ship ?
12. How did they signal from the ship for the boats to sail towards Quebec ?
13. What was the name of the place where the English landed to climb the cliffs ?
14. Why was it necessary for a small force to climb the cliffs ?
15. How did the rest of the army reach the top of the cliffs ?
16. Why did one party of the English capture the small French battery at Samos ?
17. Was the main battle fought at the top of the cliffs just above the landing place ?
18. How near did the English allow the French to get before they fired ?
19. Why was this ?
20. How did the French cross the Charles River on their march against the English ?
21. What allies had the French ?
22. What happened to both leaders ?

23. Describe the conditions of the English army in Quebec during the next winter.
24. What did the French army do very early in the next spring ?
25. What decided in the spring whether the French or English should hold Quebec for ever ?

V. TEST ON "THE WORLD WAR AND AFTER"

1. What is the League of Nations trying to prevent ?
2. Why did the quarrel between Austria and Serbia lead to a very big war ?
3. Why do we call the last war "The World War" ?
4. Why did the film show you the boundary lines of the European countries bending in and out after the war ?
5. Give the name of three countries where the towns were destroyed and crops ruined by the war ?
6. Why were you shown all the crosses on the film ?
7. Have all the people who were wounded and blinded in the war been cured ?
8. Do you remember the amount of money the war cost ?
9. Who was the statesman who determined to join the countries together to prevent any other big wars ?
10. Where are the headquarters of the League of Nations ?
11. Has the League stopped any wars up to the present ?
12. What two countries quarrelled over the Aaland Islands ?
13. Tell me all the pictures you saw on the film to show that the Aaland Islanders were hard-working ?
14. Did the dispute lead to a war ?
15. Who settled the quarrel ?
16. How did the League get to know what the Islanders thought about the quarrel ?
17. How did the League find out the point of view of both Sweden and Finland ?
18. In what sea are the Aaland Islands ?
19. What did the film teach you about that sea in winter ?
20. Why did Greece and Bulgaria quarrel ?
21. How long did it take the League to stop the quarrel from becoming a war ?
22. Which is the better way of settling disputes, the League way or war ?

This method was decided upon since the children had already had pretty thorough essay tests, free within limits, on the films. In the case of the League film, the most difficult film for scholars of this age, the children wrote the usual type of delayed test before answering the short questions. The results of the delayed tests are set out in the following table :—

207. Results of Delayed Tests

TABULATED RESULTS OF DELAYED TESTS : EXPERIMENTS 62-65—A RURAL SCHOOL

Scholar's Number.	Standard.	Usual Mark in Delayed Test.	ROMAN BRITAIN.				WOLFE.		LEAGUE.		LEAGUE.	
			Per cent.	A. Mark.	Per cent.	B. Mark.	Per cent.	C. Mark.	Per cent.	Mark.	Short Test.	
											Per cent.	Mark.
1	VII.	A	100	A+	100	A+	97	A+	88	A	100	A+
2	"	B	75	B+	50	C	87	A+	76	B+	91	A+
3	"	B-	97	A+	95	A+	85	A	66	B	92	A+
4	"	B-	86	A	95	A+	63	B	75	B+	92	A+
5	VI.	C-	82	A	52	C+	80	A	72	B+	88	A
7	V.	B	67	B	70	B+	76	B+	60	B	95	A+
8	"	C-	66	B	72	B+	80	A	48	C	62	B
9	"	C-	70	B+	40	C-	54	C+	24	D-	56	B
10	"	C+	75	B+	78	B+	60	B	52	C+	97	A+
11	"	C	52	C+	80	A	80	A	66	B	88	A
12	"	C-	56	B-	75	B+	67	B	56	B-	95	A+
13	IV.	B-	66	B	60	B-	62	B	54	C+	88	A
14	"	C-	63	B	68	B	68	B	45	C	68	B
15	"	B-	75	B+	70	B+	85	A	50	C+	84	A
16	"	C-	45	C	62	B	60	B-	40	C-	56	B-
17	"	D+	46	C	33	D	42	C-	26	D-	48	C

NOTE.—(1) One child (No. 6) left at the end of the Christmas term. (2) One boy absent from Delayed Tests through scarlet fever. (3) System of marking :—A, 80 per cent. and over; B, 55-79 per cent.; C, 40-55; D, below 40 per cent.

208. Discussion of Delayed Tests : Experiments 62-65. The children reach a standard far higher than their average in the deferred as in the immediate tests. The weakest results are obtained with Reel II. of "Roman Britain" and with the Wolfe film. In the one case two children (Nos. 9 and 13) merely reach their usual grade, and two (Nos. 2 and 17) fall below. In the Wolfe test four children do worse than usual (Nos. 9, 13, 15, 17), two retain their average grade (Nos. 10 and 16). In each case, these films were shown without preparatory lessons, and have certain weaknesses. The scenes in the Roman Britain reel are short and inconsecutive ; the Wolfe film is over-long and intricate. One child (No. 13) does no better than usual in the League, free test. Otherwise, for every test, every child improves upon her usual standard in a deferred examination.

209. Headmaster's Report : Experiments 62-65. The Headmaster reports : "The results of these delayed tests have proved definitely that *each* child has done better than in ordinary tests under ordinary circumstances. The tabulated results show at a glance that all the children, bright, medium, and dull, are better than their usual. The essential points in each film were generally well remembered, and there was not the usual amount of haziness of ideas. The impression made on their minds is evidently much clearer than that given by the ordinary teaching methods." The Headmaster in conversation fully endorsed the views of the Headmaster quoted under Experiments 60 and 61 on the special value of films for the rural child, who is cut off from the educational amenities of the towns and mixes with comparatively few people. The experiments showed that his children had made greater gains in information, been more stimulated to imagine and to think, from the use of the film than was the case with the usual methods ; they also remembered better what they had learned. He concludes his report : "If every school could overcome the initial financial outlay, I believe there is no other serious obstacle in the way of adopting this means of supplementing in a most interesting, delightful, and instructive way the teaching of history in all schools."

210. Good Results partly due to Increased Experience of Investigator. These experiments, then, suggest the high value of the film in the country school. One more point should be mentioned here. In using the film in Experiments 62 to 65, I had the benefit of several months' experience ; they actually took place in December 1929, and were almost the last tests. I knew the films, the weaknesses in them that could be counteracted by oral comment. I was now accustomed to the machine. I had learned from experience the methods most likely to give good results. That is, I knew how to use my tools. In the early days of the enquiry, the film laboured under the strong disadvantage of my lack of experience in its use. To make comparisons between the results of the first film lessons and usual lessons was not entirely sound, for while I had several

years' experience to guide me in the use of ordinary teaching aids, I was completely unaccustomed to school use of the film. Experiments 62 to 65 demonstrate more clearly than some other tests the value of the film ; the superiority of film score over usual score is marked. I suggest that this is largely due to the fact that at last the film was being more fairly tried as against usual methods. It was no longer an unequal contest between a tyro and a veteran.

CHAPTER IX

GENERAL CONCLUSIONS ON THE USE OF THE FILM IN ELEMENTARY SCHOOLS

211. Justification for drawing General Conclusions. The foregoing tests performed in all kinds of schools established definite facts concerning the value of films. The recurrence of certain features in oral lessons and written tests, the almost entire unanimity of favourable opinion from teachers who assisted in the experiments and saw the emergence of these traits, justify the drawing of definite conclusions. On trial, the film proved itself capable of contributing to all the functions postulated at the beginning of the report as the ends of history teaching. It achieved some of these aims far better and more quickly than do other means.

212. The Film helps Children to learn. The film helps children to learn facts. The oral lessons proved in most cases that the films were minutely observed. "What was the thing like a mace that the man by the Governor lifted?" queries the boy of 12 when the teacher has omitted to mention the lictor in the lesson on "Roman Britain." "Were they knifing the man on the ground?" another asks a completely mystified investigator, who has failed to notice a human destined for sacrifice carried amidst the crowd of dancers round the Britons' altar. Except in the case of Experiments 32 to 34, 52, and 53, when the unsuitable Naval Warfare film was used, the general standard of the immediate essays of all classes was well up to average standard and usually higher.¹ When a film suitable to the age of the children was used, the teachers generally reported an improvement in the written work done soon after the film-showing, longer essays, a clearer understanding of essential points, an awareness of atmosphere. In the few cases where short-answer tests were given,² the percentage of correct answers was higher than the average for the classes concerned.

213. The Film helps the Child to remember what he learns. Moreover, there is a strong presumption in favour of the view that the child taught with the help of a film remembers more than a child who has only oral lessons. The results of Experiment 2, a formal experiment, with all but the two youngest groups indicated this³; the quoted scores of the informal tests corroborate.⁴ It is not certain to what extent this result

¹ *E.g. supra*, 156, 158 and quoted reports and analysis of marks, *passim*.

² *Supra*, 160, 196.

³ *Supra*, 56, 60, 76.

⁴ *Supra*, *e.g.* 163, 164, 168 and quoted reports and analysis of marks, *passim*.

would hold if films were constantly used in school. In this enquiry, the films have possibly remained more clearly in the children's memory from the fact that they had often seen but one film in school. The formal tests were useful in indicating the lack of wisdom in showing several films of somewhat the same type during the same term.¹ In every group there were one or two who confused the three films "People of the Axe," "People of the Lake," and "Roman Britain" in the delayed tests. For instance, the interior of the house of the Celtic Chief is described in essays on the Lake Village. This fault is pardonable in young children since the three films have many features in common. Confusion occasionally occurs in other cases, where more than one film was seen. A girl of 13, writing of the Wolfe film, imports the press gang scene from "Naval Warfare" to explain how Anson manned Wolfe's ships. More serious, a child of 12, who saw both "Roman Britain" and "Wolfe," describes a stand of English soldiers wearing the Roman helmet and cuirass in 1759. Such mistakes indicate that the film is no panacea for all the ills of memory, and suggest a possible danger in its too frequent use. On the other hand, such errors have been exceptional in the enquiry, during which several classes have seen three or four films. Over and over again children have reiterated that they can remember a film better than an oral lesson. "I can see in my mind's eye the picture, but the words are completely lost." Though wary, for the reasons given, against too complaisant an acceptance of the superiority of the delayed results over those usual, it must be admitted that they bear out the children's contention. In a few cases classes wrote better essays in the deferred tests than immediately after the film.² The boys of Set D in the formal tests improved considerably upon their first performances in four out of five of the delayed tests, possibly, in this case, because they came to the essay fresh without preliminary tests, or tackled a free descriptive answer more cheerfully than one demanding thought. Certainly, they wrote far longer answers in the second than in the first place, omitting little of the detail of the film.

214. The Film is a Help to the Non-specialist Teacher from the Informational Aspect. The teachers recognised the informational value of good films for themselves as well as for their classes. The non-specialist teacher has to give instruction in every subject in the curriculum. In all of them, he is supposed to keep to some extent abreast with modern thought and research. It is an impossible demand. Time does not permit of intensive study of any one of them, or, at any rate, of more than one of them. This will not always be history. The teachers themselves were the first to point out that the non-specialist teacher cannot easily acquire from reading the detail either of action or of social background which the historical expert can concentrate into one film.³ Many teachers, specialist and non-specialist, recognised, for instance, that the Wolfe film corrected many of their hazy notions concerning the operations of the British army from the time of landing at the Foulton beach to the formation in line of

¹ *Supra*, 83.² *Supra*, 151, 177.³ *Supra*, 146, 166, 189.

battle on the Heights. Moreover, I think it should be recognised that some people are teaching history feeling for it no enthusiasm, a few with positive distaste. Some teachers, whatever their goodwill, have little power of narrative. In these cases, the text-book is over-used, or in other ways the pupil suffers. In such circumstances the film would come to everybody's aid, that of teacher and taught. One child, asked his opinion of the film method, wrote : " History is interesting if you have a good teacher, but if not, it is dull. If you see a film it does not matter what your teacher is like." I disassociate myself entirely from his last statement ; the film reaches its maximum value only if skilfully used by the teacher ; but it is certain that the film, with its power of giving reality and life, could bring a new element into many an otherwise colourless history course.

215. The Value of the Presentation of some Matters in Detail. The children benefit from the presentation of important events with a wealth of detail. It is this significant detail which lessens the child's sense of the remoteness of the long past and makes its people live. The whole art of history teaching appears at times to lie in the power of selection. All but the supremely important matters need to be discarded so that there is time to treat the rest with that fullness which spells interest for the child. Teachers have been urged to try and achieve this communication of detail and so of life by reading extracts from original sources to their pupils.¹ In practice this is not conspicuously successful with children under 14. To short extracts of a few lines they kindle. If more is read, the difficulty of the archaic language wearies them. In my experience, the average child delights in stories of Elizabethan wanderers far more when told by the teacher in modern language than when read to him at any length in Hakluyt's words, immortal though he be. It is the teacher's task to know his sources, to take from them the vivid detail, and to translate them into language that a child appreciates. But time is short and chronicles long, not every teacher a history enthusiast, nor a happy weaver of tales. Not every child can catch a picture told in words however skilfully. The film solves the problem with conspicuous success. Within the space of one lesson period it can portray an event with a comprehensiveness of detail impossible to oral description.

216. A Special Contribution of the Film is this Depiction of Detail. Neither teachers nor scholars feel that it is for the teaching of an outline of the main events of a period that they chiefly value the film. The teachers can give adequate drill in such matters. Children have an enormous respect for what they term " facts," a certain irreducible minimum of information on any epoch that they know their teachers endeavour to drive home. Some children feel that they cannot rely on the film to teach these facts. " The pictures on the screen show things clearer than lessons, but in lessons one learns facts and dates a lot better than it can

¹ Board of Education *Handbook of Suggestions for Teachers*, p. 116.

be shown on the screen." "In my opinion the film made the taking of Quebec clearer to me than if I had just had an ordinary lesson on it. The only thing where a lesson would be better than a film is for knowing the facts." These are representative opinions from a class aged 12+, who wrote immediately after seeing the Wolfe film for recapitulatory purposes, without intervening discussion. But teachers and pupils feel that the film is the best medium for the portrayal of these events in their proper setting, for giving costume, custom, details of topography. Many examples of the teacher's appreciation of this aspect of the film and the children's evident pleasure in realising such details have already been quoted.¹

217. Examination of Replies of a Class of Boys on this Point. Refreshing expressions of views on the value of films were given by 22 boys aged 12 to 13 in an Elementary School where much time is spent on individual work and the boys are particularly encouraged to form their own opinions. The history is taught by a specialist, and the school has a cinema room where a small Pathé projector is used. The boys had seen one or two historical films on this, and the Wolfe film on the Houghton Butcher projector. These are extracts from their remarks: "When one reads from a history book one can only get all the main points, but when watching a film one can get all the little points as well as the big ones." "The film shows the type of dress, the social habits, and the machines used in warfare, whereas a teacher forgets to mention all these minor details." One boy makes the point that boys like to know about ships, weapons, clothes, but that the teacher could not hope to deal with them. "It will take too much time." Another, referring to the same matter, adds, "It is just the other way about with the film. It describes as it's showing." The consensus of opinion here is that the film is an improvement on other methods, giving both main facts and details, but that a teacher is also needed. "In films we do not see the causes and results, but the teacher could explain that after the film. The teacher could tell us some of the main things which we would not see in a film." A final quotation brings out clearly the cumulative effect of detail added to graphic detail. One of these boys, like the others, points out that the film is far better than the teacher at describing the physical appearance of people, dress, weapons, manners, ships. He gives examples of what he learned on all these counts from the Wolfe film, his closing illustration being "And instead of our great iron warships, they had ordinary sailing ships and funny old cannon that you had to put a lighted fuse to." He straightway proceeds, "Now, when you have lessons the teacher does not tell you all this and everything you see in a film. The teacher only seems to tell you the outline of it. He just tells you when it happened, what caused it, the heroes of it, and a few other odds and ends. And on the film you seem to see it in real life."

218. The Film gives Reality to History Teaching. That is to say, the film makes history real to the child. This seems to me its greatest

¹ Cf. *supra*, 105, 106, 149, 150, 172.

contribution. The effect of detailed presentation is enhanced by seeing people and things in action. "We can see the ships as they go along, whereas in pictures they are standing still." "You can always think that the Romans and Britons are alive now," said a little girl of 10 after seeing the Roman Britain film, and hundreds of children have given vent to similar feelings in the course of the enquiry. They say: "It looked real; it looked like as if you were there." "You can see the actions that are done." "It makes the people more alive." "You can see the actual thing that they do, which you can't when you're reading."

219. Children in Poor Districts especially feel this. The poorer the child's environment, the more the children stress this point of increased actuality in the film presentation. For example, of the 26 boys of Experiment 42, children in a very poor district, all wrote, in reply to a question as to whether the film helped them, either that it made things more real, more actual, or more lifelike, and these are the typical replies from all such schools. Evidently, the children in the poor districts of our cities cannot imagine for themselves the scenes of history with any vividness. They have not a sufficient stock of ideas, sufficient knowledge of concrete detail, sufficient bricks with which to build. We have their conscious testimony of this power of the film. We also often have the unconscious evidence of their essays. Such remarks as, "I bet Wolfe was happy when he heard the cheering," from the essay of a boy of 12, can only come when children have for the moment absolutely identified themselves with the people of whom they write.

220. The Film makes the Past less remote. Several teachers have noted the greater sense of familiarity with which their children wrote of the past after seeing the films.¹ The people of history become more alive; they also become less remote, far more akin to the children themselves. The children begin to realise that, though customs have changed, these earlier peoples did much the same kind of things as are done to-day; they had houses and families, ate, made clothes, worked. There was the same business of living and of earning a living. In spite of essential differences of ideal and outlook, integral distinctions in social framework and the like, as well as in all manner of superficial usages, the bedrock of life was very similar and human nature much the same. There is no doubt that the films bring all this home, and the sense of surprise with which children register the fact indicates that in this direction ordinary lessons have frequently failed. "It is more clearer to me how they get their food and living," writes a girl of the Britons. "I like to see them doing what we do now," says another; and "I did not know that the Britons lived in little houses like them you have when you are camping out." "I never thought of the Romans living in houses and having meals." "It never struck me that there were any dandies amongst the Romans. I thought

¹ *E.g. supra*, 127 (b).

they were all serious." "Well, are you sorry you saw the dandy on the film?" "No. It makes them more like us if they weren't all the same." At the same time, the film with its detail emphasises contrasts between present and earlier conditions better than other means. Most children who saw the Wolfe film already knew the story, but many were astounded at eighteenth-century methods of warfare.¹ They had not realised conditions from lessons nor from books.

221. Lack of Knowledge prevents the Child from correctly realising Scenes orally described. Many teachers will object, "But I can make History live for my classes." No doubt, but probably we often over-estimate our powers. The child's knowledge of detail is far less than his teacher's. We do not pause in our story of Becket's cloak and the beggar to explain down what sort of a street the king and his chancellor rode. The child's imagination is bound often to lag behind our own. One or two children have stated in their papers that they cannot picture events quickly enough to keep pace with the teacher, so that they either miss part of the lesson whilst mentally constructing a scene, or gain merely a vague idea of the whole. In the light of what children say of the help of the films, it seems probable that often when we congratulate ourselves on having made some episode "live," we have made it vivid not so much to the class as to ourselves.

222. The Film is clearer than the Oral Lesson. Brighter children and children of wider opportunities do not emphasise quite so strongly as the others the sense of reality created by the film, but they feel that they get far clearer impressions from films than from ordinary lessons. Set D of the formal tests, 60 boys, answered a questionnaire of which one query was, "Did the film help you to learn History? If so, in what way?" All the 60 declare with much conviction that the film is helpful, and mostly for two reasons: "the film gives more details," and "the film is clearer." One boy says that he only gets vague ideas from oral lessons, another that the film is useful, for with it "you can't imagine wrong ideas." Other comments are: "In a lesson you don't always know what he (the teacher) means." "In a film you would see things happening, while in a talk you would wonder what it is like." "With a film you can see really what is happening"; the boy responsible for the last statement instanced how much clearer the shield wall became to him from the film. One boy says, "You see the historical event as near the real thing as possible"; another "realises" better past events. "The film makes you feel certain and accurate about *other* lessons," writes one boy. Such remarks show that the children are not content with the haziness of their own mental pictures, as does the reiterated statement, "the film seems more true." A girl of 12 said in a lesson that she liked seeing films on what she had previously learned, for "it proves what is in your mind." She was glad to have ideas of which she was not over-confident confirmed.

¹ *E.g. supra*, 133, 159.

223. The Film stimulates the Constructive Imagination. This leads directly to the next point, the effect of the film on the children's imagination. It is often contended that the sense of life given by the film, this clarity of impression, is gained at the cost of a deadened imagination. This is not so. It is "other lessons," not merely the particular film topic, which films illumine. It is dangerous to encourage children in imaginative reconstruction of historical scenes if they have not a mass of material with which to build.¹ The film provides the necessary detail quickly and comprehensively. From one film of each period the child can obtain sufficient background to construct with some accuracy a mental picture of other events of the same epoch. It has been recounted that the children concerned in Experiments 62 to 65 felt that after seeing a film ordinary pictures and books conveyed more to them.² Films used judiciously stimulate the constructive imagination as nothing else, for children who see films think of historical characters as living beings, and gain at the same time the knowledge of archaeological detail wherewith to see these people moving amidst their true historical setting.³

224. Film Detail should be plainly shown, or Misconceptions follow. Another caution must be given here. Oral lessons may leave children with indefinite notions of social background. A film, unless egregiously clear in detail, can lead to woeful misconceptions. In the Roman Britain film, a Druid in long robes speaks from the top of an altar of so strange a shape that it is confused with a tiny hut, and a girl of 11 writes, "I saw a straw hut that they built and there was a lady on top of it." At least 25 per cent. of the children who saw the same film think that the British women watched the battles from behind some kind of fencing, not from carts. Such mistakes arise from avoidable weaknesses in the films. Others occur, as in oral lessons, simply from the children's immaturity. The sub-title "Signals were made from the watch-towers at night" leads to the statements, "They lit torches to let the people know that it was bedtime," and, "The man stood on one of the towers at night and gave the signal for all the lights to be turned out." These are reasonable mistakes, suggesting dim memory of the curfew. Many children have been puzzled by the walls round Quebec, did not realise that the English entered to occupy the town, and referred to them looking out to sea from "the castle." Two children understood that it was Nelson himself that the press gang dragged from hiding in a barrel and forced to sea. Such errors point the need for free discussion after the film-showing, so that the children can make their mistakes at once and have them corrected. It should be said that such misapprehensions are extremely rare in comparison with the number of accurate impressions received.

225. The first clear Film Impression is not necessarily lasting. Further,

¹ Cf. C. B. Jarvis, *The Teaching of History*, p. 22; W. H. Woodward, Essay on "The Teaching of History in Schools," in *The Teaching of History*, ed. Acton and Archbold, p. 71.

² *Supra*, 204.

³ Cf. *infra*, Appendix D, 4.

initially clear notions may dim with time. Boys who knew the rectangular shape of the Roman shield in the immediate test drew it with point at centre base some weeks later. A girl of 13 drew a Roman helmet with a nose-piece after the Norman fashion six weeks after the film. A girl of 10 in the delayed test taken six months after the film wrote of the Britons : " The women dressed very nice. Court ladies sometimes wore crinolines and little hats." Both formal and informal tests have shown that in this enquiry, whatever might follow if the film were regularly used, the children have remembered the films better than oral lessons, and such confusion as in the three examples quoted is unusual, but it gives a warning against a too implicit trust in the continued clarity of impression left by the film.

226. Summary. So much for three of our criteria. When the film's weaknesses are recognised, it still remains true that it imparts information at least as successfully as the oral lesson. It seems to help children to remember. Very distinctly, and far more than oral teaching, it gives life to historical episodes and stimulates the historical imagination. Does it also help to train the children to think clearly on historical matters and to create a real interest in history ?

227. The Child is not Mentally Passive while looking at the Film : Intellectual Curiosity is roused. The criticism, frequently levelled against the film, that it leads to intellectual inactivity, mere passive looking on the part of the child, is unfounded. One forbears to wonder how much mere passive listening goes on unchallenged in the schools. Yet, though we rightly compare the film lessons with the ideal oral lesson, it is evident that the film does not encourage mental inertia.¹ Witness the questions asked on the first opportunity by most of the classes who have seen a film in school. Many children have said that the chief disadvantage in using the film is the inability to ask questions when they wish. They cannot stop the film, and have sometimes forgotten the query when the film has reached its end. The children are intellectually alert while they are looking at the screen. Their remarks show that if they know anything of its subject matter, they are anticipating coming scenes. They are annoyed when the film fails to satisfy the intellectual curiosity it so successfully evokes. Scholars of all ages ask why the League film does not explain the respective claims of Sweden and Finland to the Aaland Islands, and the reasons for the final adjudication. They infer reasons for themselves from film material, since none are given.² They are immediately critical of possible falsity of detail. A boy of 12, for instance, who had previously seen the film " People of the Lake," when asked to describe the points which have most interested him in the Roman Britain film, writes, " I noticed that the distaff and spindle with which the Queen was spinning were different from the distaff and spindle which were shown in the film a fortnight ago."

¹ Cf. *infra*, Appendix D, 3, 7.

² *E.g. supra*, 176.

228. **"The Film gives Mechanical Perfection of the Narrative Type of Lesson."**¹ Not that it would vitiate the method if the child were merely in a state of passive receptivity while he was looking at a film. A child cannot work at high tension through each of the seven or eight periods of a school day. He needs his recreational periods. And there are times in history teaching when a child's chief function is to absorb.² Much of the subject matter cannot be deduced by reasoning. It must needs be presented to the class by the teacher, by the text-book—or by the film. Other things being equal, the best method is the one most pleasant to the child. To me, the text-book method for a first learning of the facts seems execrable. Except to the clever child, it becomes a stumbling exercise in reading, not an illumination of the past. Pupils delight in a well-told tale, but here, again, the child's activity is temporarily in abeyance, and the spoken story is not so realistic as the film. After the narrative lessons come periods of hard work when the children put the knowledge so acquired to use.

229. **In view of the Difficulty of the Subject for Children, it is an Advantage that the Use of the Film makes easy the Learning of Certain of its Parts.** The use of the film will not make too easy the learning of history. It might, if lesson after lesson scholars merely sat and gazed at the screen. But in that way we should not be teaching History at all, merely skirting round its lighter fringes. In any oral lesson, even if largely of the narrative type, the class participates throughout, but the teacher also takes a considerable part in his presenting and elucidating of facts. When a film is used, all the presentation is performed at once, but the class, quiet then, takes its full share in the following discussion lesson. In using the film the child's period of greatest activity is merely postponed, that it may be the more intense. History is in many respects a difficult subject for children, remote and abstract, so that any method which lends greater ease to learning any of its parts is, *ipso facto*, welcome. Much historical matter will remain for study whose comprehension will demand the exercise of the child's fullest intellectual capacities. The interest created by the film will help to carry the child over what, to him, are the more thorny tracts.

230. **The Use of the Film should be combined with Oral Teaching.** No doubt the mere silent showing of the film would have its value. It might be trusted even so to bring the past to life, in itself a sufficient justification for its use, and to convey a certain amount of information, but a great part of the value of the film is lost if no discussion lesson follows. A child best assimilates material on which he has used his brains. It is one of the greatest advantages of the film that it quickly provides a body of material to form the basis of discussion, and material in which the child's interest has been so aroused that he is prepared without further urging to exercise upon it his thought.

¹ From report of teacher of Set G.

² Cf. *infra*, Appendix D, 6.

231. The Film creates a Desire to know more. The film did not merely arouse the ephemeral interest which attaches to seeing the pictures on the screen, but awakened that desire to know more which led the children in the follow-up lessons to want to talk, to ask questions, to discuss. In most cases far more zest than is usual was shown by the classes in the follow-up lessons. Throughout the enquiry teachers have commented on this fact.¹ The proof of the value of the film lies less in the children's written exercises than in the keenness of the oral discussion. Several teachers have remarked that the exercises give no clue to the vivacity of the lessons.² The class by no means depended on the teacher to supply all the topics of debate. The initiative came largely from the children, the ideal condition. It is this far greater readiness of the children to propound questions for themselves which distinguishes film discussions from those encouraged to-day by most teachers in their usual lessons.³ Naturally, the children's questions often dealt with matters of detail, but they provided admirable starting-points for the teacher to lead the class to realisation of the wider aspects of the subject. The children interestedly followed the topic through its divagations since one of their number had set the path himself. The explanation of the increased eagerness of the children appears to lie in the sense of familiarity with the subject given to them by the film. A pupil feels more confident in discussion. His knowledge has been obtained through another medium than that of the teacher. It is interesting to talk, for he has something of an original contribution to make; he is not merely giving back to the teacher information initially gleaned from his instruction. Attention has already been drawn to the value of the film as introducing a point of view additional to that of teacher and text-book.⁴

232. It is a Decided Advantage that Children enjoy the Films. The children are scarcely conscious of any effort either while seeing the film or during the lesson. They enjoy watching the film; they enjoy talking of it. The atmosphere of instruction is dispelled, so that a boy of 12 writes, for instance, after the Wolfe film, "I think that one can understand history better by films than by education." And it is a truism that only when a child enjoys a piece of work and gives it his full interest does he really learn. "Films will most likely learn the boys more," says another scholar aged 12, "for they will probably enjoy the lesson in picture form better than the teacher talking to them."

233. The Film, from the Creation of Interest, helps in the Development of Powers of Thought. The film might be expected to aid in the training of observation. Equally surely, it helps in the development of powers of thought. The children readily answered questions of detail on the film. With equal animation they addressed themselves to the solution of harder problems. The subjects were conditioned by the films, but not staled to

¹ *Supra*, 128, 145, 146, 151, etc.

³ *E.g. supra*, 188, 196.

² *E.g. supra*, 132.

⁴ *Supra*, 162.

the individual classes by repetition—contrast of British village and Roman town, of British and Roman armies, reasons for the success of the English in 1759, the share of the navy in securing victory. Girls of 13+, after seeing the League film, successfully worked out in class replies to all the popular criticisms of the League. The general plan of the follow-up lessons was first to let the children raise any difficulties, satisfy any curiosity, and thus to make sure of the detail of the film, then to proceed to some problem questions on the film. The children were so interested that they thoroughly enjoyed working out the problems, so at home with the facts that they supplied complete answers, complete within the material presented to them, with remarkable speed. The film, rightly used, gives no facile impression of history. It is a stepping-stone to the exploration of manifold problems. It awakens intellectual curiosity and so kindles interest that it predisposes the child willingly to attack questions the solution of which trains his judgment and develops his critical faculty. And, after seeing the film, the child feels so conversant with the facts that he has greater confidence in making his first tentative judgments upon men and their acts.

234. The Permanence of the Interest created. It was not easy to assess the permanence of the interest created, but some indications of its lasting nature were forthcoming. One or two models of objects seen on the film were brought to me by children a week or fortnight after my first visit. A boy of 10 made a Bronze Age spindle from a meat skewer, card-board, and plasticene; a boy of 12 made a clay bowl with spiral ornamentation, and proudly said he had made it with coils like the Briton on the screen. Such things were done without any shadow of suggestion even that their production by the children was possible. Several teachers wrote some time after the experiment that the interest created by the film, either in history or in the special topic shown, had continued. Dull children had remained awake to the fact that history was enjoyable.¹ One teacher said that he had noticed for weeks after the films that the boys frequently filled in odd moments of leisure by sketching things seen on the film. Children asked for books on the film topics.² One teacher, writing in February after Experiment 61 taken in November, said, "Since seeing the films, the children's interest in that period of history has been stimulated and I have now obtained three books on the children of (a) Stone, (b) Bronze, and (c) Iron Ages, which are much appreciated by the class." The Headmaster of a school in a very poor district said that one of his scholars took out the story *Beric the Briton* from the school library after seeing the Roman Britain film, and said on returning it, "A jolly good film could be made out of that."

235. The Effort needed to give Verbal Expression to Film Memories. Before leaving the question of the effort evoked by the use of the film, we should return to consideration of the child's difficulty in giving verbal

¹ *E.g. supra*, 127 (a).

² *E.g. infra*, Appendix D, 8-9.

expression to visual impressions. The child of limited experience and limited vocabulary finds it hard to clothe his film memories in speech. This difficulty was met with in the oral lessons with the city boys of Experiment 40, and the country children in Experiment 60. More usually it is written work that proves hard in this connection, and the poorer the district the greater is the stumbling-block. At one school the Senior Class saw the Wolfe film, and later, "The World War and After." On the first occasion, the class was divided, half seeing the film and half having an oral lesson. On the second visit, a boy who was helping to fix up the apparatus said he was glad he had come to the lesson on Wolfe and not been in the film group, since an exercise had afterwards been set. "It's a lot easier to write from a lesson; you have the words, and you've only seen it with a film." He was enquiring on behalf of the class if they were going to talk about the film afterwards or have straight away to write as before. "If we have to write, X and Y don't want to come." This again proves the necessity of subsequent discussion lessons. The younger children of Experiment 63 knew the name for neither the torch nor brazier seen on the film till they enquired in the following lesson. In the informal tests, the teachers often reported on the increased fluency of the film essays, due apparently to the greater store of material at the children's disposal and their feeling of familiarity with the film subjects.¹ But these children had had a discussion lesson after the film. Under Experiment 44 was discussed the improvements in the essays on Wolfe of a class of Senior girls after they had seen the film, an improvement due largely to an enforced originality of phrase in describing film scenes. The children are not able in these circumstances parrot-wise to repeat the words of the text-book. The film essays, from this aspect, demand more than ordinary effort from the child, but, if the greatest of the children's difficulties have been removed by discussion, these exercises are very individual productions in the end. Not more than one girl in a class would be likely to say, for instance, of Roman shields, that they "were something the shape of an old-fashioned suet-scraper," a true but certainly not a usual description. This girl of 12 will surely remember the shield the better because she produced from her own store of experience this novel simile.

236. The Making of Visual Images. It has sometimes been urged during the investigations that the child's work should not be done for him. He should make his own images, and if he is relieved from this task, another should be set in its place. Here is the compensatory effort, the rendering of what the child has seen into words. Moreover, there is no surety that the members of an orally taught class are making visual images. Whether they do or not is of little importance. Realisation of a concrete object, understanding of a situation, is possible without the making of visual images. Comprehension is the only vital thing. It is not easy to gauge what clarity of understanding is possessed by a child

¹ *E.g. supra*, 127 (b), 132, 195, etc.

after an oral lesson. We merely know that he gives us back words for words, and perhaps somewhat too readily assume that the words have for the child the same connotation as for ourselves. Sometimes a rude shock awakens us. In one school, a girl of 12+ wrote a clearly stated answer on a Stone Age village and its hill fort. All might have been well had she not decided at the end to sketch the scene. The fort, despite the teacher's description of mound and stockade, was drawn like a Norman square keep. Yet there was nothing in the essay to indicate her lack of comprehension. In using the film, we are at least sure that the correct idea has been presented to the child and can test his observation afterwards. It was found, during the enquiry, that the child's attention did not wander from the screen. Several children are at pains to indicate the superiority of film over oral lesson in this respect; they cannot choose but concentrate. Novelty might account for some of this attention, but there seems to be wisdom in the child's remark that they would not tire of films in school for they do not tire of them elsewhere.

237. The Film helps many Backward Children. The use of the film, then, brings nearer the accomplishment of all our aims in history teaching. It helps the child to learn and to remember; it stimulates the imagination; it helps to develop a capacity to think clearly; it creates interest. In the last three ways it is of assistance to a high degree. Moreover, the film proved of particular assistance to the children usually weakest in history, a special boon attendant on its use. In almost every experiment, though not invariably, the teachers noted that the backward children participated far more than usual in the class lessons,¹ and the marks quoted throughout the preceding chapters indicate that such children often reached a higher standard of written work both in immediate and in deferred tests.² Their essays were longer and showed both more understanding and sense of atmosphere.

238. Possible Reasons for their Improvement. These children may usually do badly for several reasons. They may be poor readers, unable to realise scenes from a book because they scarcely understand the words. From this aspect, the film is an advantage to the village child whose vocabulary is apt to be less wide than that of town scholars. They may be unimaginative, and overtaxed by our predominantly oral methods. They may be "visuals," improving in film tests because of the employment of a method more suited to their mode of thought. The film removes the special difficulties of them all. In addition, they may be listless and apathetic from faults in their environment; then, the film proves a stimulating influence. Hence, the success of the film is most marked, not only with backward children in the average school, but, more particularly, in schools where most of the children are handicapped by their bad social conditions. Several reports emphasising the highly improved results in film lessons and tests in the latter schools have been quoted, and the

¹ *E.g. supra*, 131, 132, 169, 183, etc.

² *E.g. supra*, 138, 170-1, 202, 207, etc.

consequent belief of their teachers that the film would be of invaluable assistance to their schools.¹ Two other short quotations, giving slightly different points of view, may be added here. One Headmistress writes, "Historical films are most necessary in this neighbourhood as a complete change to what is seen in the ordinary cinema." It is as much the office of the schoolmaster to-day to train the child's taste in films and to inculcate a critical attitude towards films, as it is to train a love of reading and of the best in literature. Another teacher says, "As an aid, I think historical films would be invaluable in schools of our type, where environment is apt to cramp, if not to crush, the aesthetic side of the child's nature." It has been shown that children respond to attractive film settings.² This teacher's comment opens out another vista in estimating the possible functions of the school film.

239. Some Children usually good at History do less well in the Film Tests. Very often it was noted that the bright children, though still remaining amongst the highest groups, achieved something less than their usual result, dropped, for instance, from a usual A to a B+ grading.³ These children may owe their usual superiority to strong imaginative powers, which are discounted in these particular tests. During the enquiry, just two cases occurred of scholars objecting to the superimposing of the film pictures on their own imaginative version. One child said, "I think that the film 'The Taking of Quebec' is very good. Its disadvantage is that in the ordinary lesson there forms a picture of the scene in one's mind. I think that when this picture is compared with the picture shown on the screen it is always totally different, and that spoils the lesson and the film." The comparative failure of these bright children was shown in the unaccustomed brevity of their essays, sometimes in unwonted confusion in description indicating lack of grasp. Occasionally, the work of the scholars usually foremost became absolutely, not merely relatively, poor. These pupils may have a stronger auditory than visual memory, a trait to which our existing methods of teaching give the advantage. Or they may be of the type industrious but slow; the film proceeds too quickly for them. In Experiment 36 the teacher drew attention to the failure in the film test of a boy of this temperament.

240. The Improvement of the Backward combined with the Failure of those usually at the Head of the Class shows the Need for a Combination of Methods. Different factors are no doubt at work in different cases, but one thing is obvious from these results, the need for greater variation of method, the wider use of visual aids to redress the balance which too long has been in favour of the audile child. Matters might be to some extent improved by a more extensive use of still illustrations, but it seems that the composite picture given by the film is of more value to the unimaginative than ordinary detached pictures. The results of the drawing test in

¹ *Supra*, see 144-181, particularly 155-7, 169-171.

² *Supra*, 184, 192.

³ *E.g. supra*, 134, 191 and analysis of marks, *passim*.

Experiment 2¹ suggest that the still picture will always be useful for the study of detail, but children do not find the motionless picture so realistic as the film. The lantern, for instance, is admirable for the study of detail, but the picture remains lifeless, the people remote. It is its power of giving life which is the measure of the superiority of the film over other visual aids.

241. Consideration of Technique of using the Film : Résumé of Results when the Film followed Lessons. It remains to discuss the conclusions reached on the best method of using the film in the Elementary School. In all cases where the film was used after previous study of its subject matter the teachers reported that the children had benefited, save in the experiments with the Nelson film. When this film was used, the teachers felt that they had seen sufficient of the possibilities of the film in school to welcome its advent, but that this particular film was not satisfactory for their own scholars.² The film proved useful during the course of the study of a topic to supplement or recapitulate the oral lessons, as it was used, for instance, in Experiments 18 and 19. It was also shown to provide an interesting method of revision of a subject studied a long time previously as, for example, in Experiments 46 and 48; instead of the monotony usually associated with review of partially remembered events, the film gave a new angle for their discussion. The teacher in Experiment 25, however, felt that her children of 12 would have gained more from the Wolfe film if their knowledge of its subject matter had been more recent and more detailed; they had studied the period a year earlier. This teacher, like others, remarked that the children paid most attention to matters of which they were already cognisant. Wolfe's actions, for instance, are mentioned in essays more than Montcalm's, though this seems to be due rather to the children's greater interest in Wolfe than to forgetfulness of Montcalm's doings, since in oral lessons and short-answer tests, questions on Montcalm are rightly answered.

242. Reasons advanced against using the Film as an Introduction. Most teachers felt that the advantage in showing the film as an introduction to the study of a subject, the creation of a vital interest from the first, was not compensated by the disadvantages of this procedure. Here is a representative report on the matter. The film arouses interest "which in itself would form an introduction. But an oral introduction by a teacher can arouse interest and at the same time provide a great deal of pointed information. A great deal of the informative potentialities of the film must be wasted when the child's mind is engaged in reducing the whole thing to an understandable whole—a new subject. The important details are overlooked. If, on the other hand, the child goes to the film prepared to a certain extent for the kind of thing he is going to see, and may be put on the *qui vive* for certain valuable points in the film, he can concentrate his energy and interest to the best advantage." One or two teachers

¹ *Supra*, 54, 56, 69, 75.

² *Supra*, 141-143, 172-174.

have felt that the children would not settle down to detailed study of a subject after seeing the film. One writes, "There is a very natural disinclination on the child's part to take the brimstone *after* the treacle."

243. Résumé of Results when the Film preceded Lessons. The tests have not borne out these views. In the majority of cases the follow-up lessons after a film used as an introduction were as animated as when the reverse procedure was adopted. In Experiment 35 interest was unflagging at the end of the second oral lesson after the film, with the classes of both boys and girls. Such information as it has been possible to collect on the permanence of the interest created, does not suggest that the child's effort would slacken if a series of lessons connected with the film's subject matter followed. Yet success when the film was used as an introduction to a topic was not so uniform as when lessons preceded the film. In Experiments 58 and 60 with the Wolfe film in country schools, much confusion had to be removed in the oral lessons, though in Experiment 58 the written exercises taken later were slightly better than usual, and in Experiment 60 markedly so; in the third country school, in Experiment 64, the same film was again shown as an introduction, this time with admirable success. This was also the case with three boys' classes in the towns, composed severally of bright, poor average, and of exceptionally backward boys¹; the preparation of the last group consisted merely in a silent reading of the story. The Roman Britain film proved a good introduction to formal study for the boys and girls of Experiment 35, who were aged about 10. They, however, learned Reel II. less well than Reels I. and III., for which earlier history stories had given them a background. Yet in Experiments 59 and 63 children readily grasped Reel II., of whose subject matter they were ignorant. That is, average classes of 10+ and older learned the detail of the Roman Britain film even without preparation. But to none would the period be totally unfamiliar. In most cases the League film was shown to scholars who knew nothing of its detail, and with average scholars with conspicuous success.² In one case, the film proved entirely beyond the grasp of a class of backward girls of 13, who had had half an hour's introductory talk.³ Two other classes of girls seemed so overwhelmed by the tragic scenes of the first reel that little else in the film impressed them. In one case the girls were only 12, and children of a poor district.⁴ In the other, omission of two reels probably accounts for the result.⁵ The average classes of 11+ and upwards grasped the lesson of the League film without preliminary training and remembered a large number of facts. They needed additional lessons to drive home thoroughly and accurately all the detail.

244. Films may be used to advantage Before or After Lessons according to the Object in View. That is to say, the most consistently good results were obtained when the film was used to fix and give colour to previous

¹ *Supra*, 133, 157, 159.

² *Supra*, 136-138, 140, 177, 179-180 (with seniors).

³ *Supra*, 179 (with the C form).

⁴ *Supra*, 176.

⁵ *Supra*, 130.

knowledge, or for revision, and the majority of the teachers concerned in the experiments feel that it is in this way that they would wish to use the film. But the number of successful experiments when the film was otherwise used, prevents the enunciation of definite conclusions. Choice of method must depend on the object in view, the kind and length of film to be used. I should judge that in general a long film may well be used as an introduction if the aim is to arouse interest and create a general impression. If more thorough knowledge is required, the film should follow lessons or be short, no longer than one reel.

245. The Value of Oral Comment. The preliminary assumption that the film should only be used in combination with oral lessons has been amply justified in practice, for reasons sufficiently expounded earlier in this chapter.¹ Another very definite point with regard to film technique has become apparent, the value of occasional oral comment, with or without stopping the film, while a reel is being shown. Timely interjections appear to add considerably to the pupils' sum of knowledge at the end of the film.² In increased comment lies the explanation of the success of the Wolfe film in Experiment 64 as against its comparative failure in Experiments 58 and 60 in the same type of school. In the early tests, it was noted that children often confused Montcalm and Vaudreuil. Scholars differentiated the activities of the tall French leader from those of the short, but attributed to these figures the wrong names and official positions. Such confusion did not occur when the film was stopped at their first interview and a clear distinction made. Similarly, the name and position of Anson were not generally remembered unless attention was drawn to them by some remark. Examples could be multiplied. Children of all ages need comment on the maps and battle tactics of the Naval film. The children of Experiment 35 did not learn Reel II. of "Roman Britain" very fully when it was shown almost in silence. Detail was well noted by those of Experiment 63, when explanations were given while the film was in progress. Several teachers have remarked that their children best remembered the points which received comment.³

246. Comments were not made till they were proved necessary. My first predilection was strongly for the film shown in silence, to let the film make its own appeal. If reels were such that children could understand them without help, not even the briefest interjections have been given. The League film, for instance, needed and received no oral comment. But it quickly appeared for other films, first, that the majority of children were perplexed over certain scenes, and in the second place, that a brief oral explanation at the time of showing set them right. Further, children notice action on the screen rather than details of dress, buildings, and so

¹ *Supra*, 230-231.

² Cf. *Visual Education*, Freeman, p. 74. "Our experiments give clear evidence on the last-mentioned factor—the influence of the teacher. Its importance is indicated by the advantage of oral comment by the teacher during the showing of a film."

³ *E.g. supra*, 154: *infra*, 259.

forth. It proved well to call attention to certain features of these. Sometimes the comment was a statement of fact, *e.g.* "That is the Governor of all Britain, not merely of this town"; sometimes it was simply a directing of attention, *e.g.* "Notice how the Warrior's axe differs from the Scout's." A brief preliminary invitation to the children to notice all details of buildings, costume, and so on, as well as what the people do, helps considerably to the same end. If the children have previously studied the film topic, interjection is rarely necessary, but it is largely a judicious use of oral comment that enables a class to acquire the detail of a film whose subject matter is new. The need may possibly decrease as films more suited to school use and more readily intelligible to children are produced.

247. Stopping the Film. Even so, for examination of detail a stopped film and explanation is necessary. Children who have not earlier learned of the equipment of the Roman soldier obtain but a vague notion of his accoutrements if the film runs straight and quickly through. The teachers are all of the opinion that the value of the film is enhanced if stops for close observation are possible. One, for example, writes: "The machines used in school would have to be similar to that used in the demonstration. The extra cost necessary for reducing or increasing speed or stopping the film is amply repaid by results. It is essential that the speed of projection shall be as varied as possible, in order that the explanations can be made." Many teachers were disappointed that the machine used did not allow for winding back the film to parts of special interest or to portions under discussion in the subsequent lessons. Experiment 4, however, suggested that for learning a new topic it is better to take time for study by usual methods, discussion and still pictures, then showing the film straight through, than to spend all the lesson in showing the film with many interruptions for explanation.¹

248. Attitude of the Children towards Comments and Stops. Young scholars, on the whole, appreciate the help of the comment and do not resent the breaking of the action of the film occasioned by a few necessary stops. The 60 boys of Set D of the formal tests were asked if they preferred to see a school film in silence or with comment after they had had experience of both methods. 26 voted for silence, 34 for comments. The former felt that the sudden interpolation of a voice distracted their attention from the film, "The talking puts you off." One boy said that he never attempted to listen; another, that while he was listening he failed to notice the screen. Several said it was difficult to hear the voice over the buzz of the machine. This is an objection consequent on operating and talking at the same time. A lecturer standing at the front of the class, not at the side of the machine, is more easily heard. The difficulty vanishes for comments with the stopped film. The 34 in favour of comments said that they understood the film better with oral help. One boy said some of the captions were too short, two that the captions were

¹ *Supra*, 90, 96.

not clear. The teacher made good these deficiencies, "points out the details," "emphasises the facts of the film," "tells us the names of the things on the film." "There are things on the film that we don't understand and the teacher tells us." In most classes opinion was divided on the question, as here, but generally there was a recognisable majority in favour of some comments and some stops.¹ Naturally, the practice needs to be exercised with discretion. Stops, except at the beginning to introduce the characters, and at the maps, would ruin a story film like "Wolfe." The case is different in films portraying social background like the Roman Britain film. Since this method does not seem to destroy for the child the illusion of reality, it is justified at present by his increased knowledge of the detail of the film.

249. Contact of Teacher and Class. One Headmaster, noting the use of oral comment, writes: "This leads us to the idea that films have many advantages, but do not leave out the chance for the teacher to have personal contact with the class. This is a criticism in favour of the films which does not always hold good with other methods, *e.g.* wireless lessons." Not that this point is of great moment. Even if projectors are installed in schools, films will only be shown at intervals. The teacher can enjoy personal contact with his pupils in almost every lesson. During the film lessons it would not matter if the teacher's voice for once were silent. Indeed, it would be rather an advantage to the child, for he would see historical events presented through the medium of another mind than that of his usual instructor. In no way does the use of the film diminish the influence or responsibility or labour of the teacher. He is more than ever necessary. He must operate the machine. If the maximum benefit is to be obtained, he must know the film so that the necessary interjections can be made. This entails a private view of the film before the lesson. Personally, I did not realise all the detail contained within the films till after several projections. Usually, the teacher would not have time to see the film more than once for his own edification. The distributing firms should supply with the films a synopsis of each reel, containing not merely an abstract of the plot but what may be termed an inventory of the archaeological detail, so that the teacher can study the film with this aid before showing it to his class. He will be freed from other preparation for this particular history lesson, so that the attempt at right use of the film will not encroach disproportionately upon his leisure. Finally, the teacher's handling of the accompanying lessons largely determines the amount of benefit derived by the scholars from the film.

250. Danger of Neglect of other Aids. One teacher writes: "There may be an easy temptation to cast off many of the previously used aids. Some have urged (I know) that this will not be so. But I fear the temptation will prove too strong. We have already too little time to 'pack in' all the subjects on the curriculum, even when we do use one to aid the

¹ Cf. *supra*, 205.

other, and some things would suffer. I can see many teachers never worrying to turn out their Froissart or their *Sir Nigel* for 'local colour' (shall I call it?) when they know the lads will see it on the film next week. I can see many spurning what I am heroically hoping to do in these last few days, namely to read to them Norman Ould's *The Discovery*, a one-act play, because they expect the Columbus film will do all it does. The loss would be irredeemable to scholar and to teacher. No, this film-showing must rule out none of the other aids—'still' picture, verbal description, the selected reading and the happy class-teacher talk. I can see it killing the time-taxed teacher's desire for these things, no doubt despite himself, and further, creating the feeling that he need not even read the great historians, the playwrights, nor dip into the inexhaustible wealth of the written extract and book." This is a pessimistic view. Its fallacy is clear. Teachers who have been accustomed to prepare for their History lessons in the ways described by this correspondent will continue to do so, hailing the film as an extra aid, for obviously they are enthusiasts. On the other hand, the film will compensate for certain lacks in the History lessons of less ardent teachers.

251. **The Time involved in Film-showings.** Finally, we should consider whether the gains drawn from the use of the film are commensurate with the time involved. The point has been specifically raised in two or three reports,¹ and was frequently the subject of discussions amongst teachers during the enquiry. A film lesson appeared to encroach to an exorbitant degree upon the time-table. Time was needed to prepare the room and to fix the apparatus. The children had often one period to see the film, one for discussion, one for the written test, three periods on one subject even without any preliminary study. But this time would not be needed if projectors were installed in schools. The rooms and apparatus would be ready. Nor need a written test be set after the film; by no means every oral lesson is given its exercise. There would need to be set aside time for the film, time for discussion. If one reel of 15 minutes' length were taken, as was sometimes the case during the enquiry, film and talk need take no more than one lesson period. Even if a preliminary lesson on the topic has been given, this does not mean that more periods than usual have been taken for one subject. The film and talk merely take the place of the usual recapitulatory lesson. If the film is given without oral preparation, and it has been shown that excellent results can be obtained in this way with a short film and simultaneous oral comment, time is actually saved. The film does the teacher's part of telling so much more quickly than can the teacher orally, that the topic can be covered in one lesson, in which the child has taken active part. A 45 minutes' lesson plans out in this way: 5 minutes for settling in and threading, 15 minutes for the film, 20 for discussion, the last 5 for the children to do some expression work while the teacher rewinds the reel. Indeed, it seems that the film can actually release time for spending on difficult aspects of the

¹ *Supra*, 135, 158, 168.

subject. A later chapter is devoted to discussion of the type and length of film desirable in school. Short films are advocated for general use. Sometimes longer films of 30 minutes' length, entailing the use of a whole period, might be used to pull together a topic already studied. In this case, with the longer film, an extra period might be necessary for the treatment of the whole subject. The film takes the place of the recapitulatory period, the next lesson is spent on discussion. With our overcrowded syllabuses, can we afford from time to time to give this extra period for the film ?

252. The Film must deal with Essential Features to justify the Time spent. The answer depends on the teacher's view of what it is necessary to teach in history, and why. There is certainly no time for the film if teachers aim at mentioning every text-book fact and minor character, teach Hedgeley Moor as well as Hastings, Lovel's Rising as well as the Peasants' Revolt. In the Elementary School there is no bugbear of the external examination, with its frequent futile questioning on minor points of detail, to drive the history teacher from the path of wisdom, so that to-day a saner policy is being adopted. It is possible to teach history through the detailed treatment of major events and people ; this is detail with a difference ; by letting full knowledge of certain typical episodes serve to illumine constant trends, as the Becket controversy might illustrate the strife of Church and State. To gain time for this, many minor happenings erstwhile taught are overlooked.¹ With this method the film way is in agreement. Teachers need merely to exercise rigorously their usual task of selection. Then time can profitably be spared for films dealing with salient features in the development of national life. All but one of the schools concerned in the preceding experiments decided this question of the time involved in favour of the film.

253. Time can be spared for the Film in view of the Results achieved. Further, in view of the results seen to accrue from the use of the film, some of them scarcely obtainable in other ways, the giving of life to the past, the kindling of increased interest, the stirring of the backward child, it seems that the time given to the film would be exceedingly well spent. We should save time by losing it, for, though taking longer to study certain given topics, we should the quicker as well as the better achieve our ultimate ends.

¹ Board of Education *Handbook of Suggestions for Teachers*, pp. 120-121 ; C. B. Firth, *The Learning of History*, p. 189 *et seq.*

CHAPTER X

THE INFORMAL TESTS WITH CHILDREN UNDER TEN

254. At what age can children first profit from an historical film ? The question was explored by a series of tests with children aged 7 to 10 years old.

Experiment 66. The Roman Britain film was seen by 22 girls, of average age 7 years 6 months, in a Standard II. of a city school in a poor district, and 30 girls of Standard III. who were a year older. The younger group had had no lessons on the period. Standard III. had had four lessons on (1) The Ancient Britons, (2) The Coming of the Romans, (3) Caractacus, (4) Boadicea. All the reels were shown in the order I., III., II. At the beginning of each reel the children were told what would be in the reel, what to expect and to look for, in the way described for Experiment 59. Reel I. was shown in silence ; in Reel II. the sub-titles were read to the children, and considerable oral help given all the way through ; Reel III. was treated in the same way, and the film stopped twice for examination of the Roman soldiers' equipment.

A first follow-up lesson was taken the next day. The girls had enjoyed the film. The Headmistress writes of the " buzz of excitement and little whispers " between reels. Several children said, " *All of it was nice,*" when asked which part they liked best. One liked the spinning, one the pottery-making, and all the rest the battle. Standard III. answered very well on the first reel. Again, none of them had understood the Druid. It appeared that this title had been unknown to them, and they had not learned it from the film nor realised the Druid's business. They did not think of the man or the altar as related to the Druid shown earlier in the picture. One child asked what he was doing on the altar. All this shows that the sub-titles of the first reel had not been followed. It was very evident that the younger class, Standard II., had noticed extremely little detail. Their hands were very rarely raised to answer, though every effort was made to keep the conversation on a simple plane and to put the questions in a way attractive to these little ones. Standard III. were full of information on this first reel, but not more eager than children of 8+ are over ordinary lessons.

The following day, a second oral lesson was taken on the rest of the film. The children knew little of Reel II. When conversation turned on the market, the children could only suggest the Temple of Victory as one of the big buildings standing near ; the Statue of Victory had attracted notice. They could say little of the basilica, save that one child remarked, " It was all polished and shining." A few remembered " the rows of people," and most of them the bringing of a message. Of the message

they remembered many details. The film had been stopped, and the letter read aloud. The girls were interested that the letter "was not in an envelope," and in its roll form, its cords, and Roman capitals. Otherwise, they were most interested in this reel in the "tea-party," and thought the Romans should not have stretched their arms over the table. "All the things would spill." Most, however, had noticed the towers and draw-bridge, with the slaves at the wheel.

Reel III. had been a little better understood. The contrast in Roman and Britons' equipment had been realised. The children were interested in the soldier who fell out, and remembered the Roman shield wall. But much detail had escaped them. Not one child, for instance, had noticed that there were knives on the chariot wheels. It may be that there is no archaeological sanction for the presence of these knives, but they are shown on the film, and most young children make excited comment on them. At the end of the lesson, one child came to the front of the class and gave quite a graphic description of the battle, dwelling chiefly on the preliminaries, the challenge of the Britons' chariots and cavalry, the advance in relay, the break on the shield wall. "Then the Romans advanced and the Britons fled."

Neither the Headmistress, the Class Mistress, nor myself felt that the film had been of use to these children as an introduction to further study. The class teacher felt, not that the children were too young, but that only one reel should have been shown, and that this reel should have had very short and easy sub-titles. The Headmistress thought that the experiment had shown that the film method was unsuited to girls of this age. She pointed out that response was not general, though the brighter children, roughly about twelve of them, answered very freely. "Standard II. took really no part here, showing that acquaintance with the subject matter previously given by the teacher would have stimulated them." The class teacher wrote: "The film certainly aroused interest and provoked discussion, but hardly of an instructional kind. Interest was there before in the older group, though I certainly believe that the film would greatly add to it. Free discussion which I overheard was mostly on the film as a film—a film in school. But then discussion, intelligent discussion, is scarcely a form of expression in children so young. They showed their interest in more childish ways, as gesture and pleased recognition of various things shown." The interest was not of the order evoked in older pupils by the film. The girls were merely pleased to see the picture, not stimulated to questioning and eager class participation. The teacher called attention to "the almost complete inertness and lack of interest" exhibited by the younger group during the lesson, and doubted whether Standard III. would have "derived much instructional benefit from the film without the preliminary acquaintance with and interest in the subject," finally saying, "To some extent at least the film could reasonably be accounted a failure as an introduction to its subject. With older children the failure may not have been so complete."

The 52 girls were given a drawing lesson, with chalks and brown

paper, for free expression work on the film. Most of the children, whatever their age, 7, 8, or 9, drew either the village scene with huts and stockade, with men and women in appropriate costume and working at some occupation, of which basket-making was the favourite, or the cornfield, with the men cutting the corn and the women gathering it into baskets. One calls her picture "The Chief Poorly," and draws with considerable detail the interior of the Chief's house. Other titles are: "Boadicea and her two Daughters in a Chariot," "Turning the Wheel," "Guarding the Bridge"—two men in watch-towers with flaring torches, "Playing the Drum"—three girls give this altar scene, and "Romans Keeping Back the Britons," which two give. These children, like many older ones, were confused by the celebrations round the altar; they draw a hut with smoke issuing and a figure on the top. Otherwise, there are few errors, save that six children draw tall chimney-stacks on their huts. The dress, the long plaits of the women, the shape of the huts, the curved sickles, are well observed. Only two drawings are from Reel II., both connected with the bridge, two from Reel III.—of the cordon of Roman soldiers at which the film was stopped. The drawings bear out the conclusion of the oral lessons, that the children derived some benefit from Reel I., of whose subject matter they knew most, little from the rest.

255. **Experiment 67.** Somewhat the same results were obtained when the film "The People of the Axe," was shown to a class of children in a semi-rural Elementary School; their average age was 7 years. They thoroughly enjoyed the film, and talked freely to their teacher on what they had seen. Not many questions were asked, and those of the following kind:—"Why did Fleet climb into the tree before shooting his arrow at the deer?" The children thought he would have been able to aim better on the ground and partly hidden by a tree trunk. "What sort of fish did Fleet catch, and did he eat it alive?" as the child did not see Fleet kill the fish. The children were not clear about details. Some of them thought the deer were wolves. They had not followed the subtitles, though all of these had been read aloud to them. The teacher thought that the class needed more verbal explanation than had been given. Before the delayed test was taken after an interval of seven months, most of the bright children had been promoted. Of the backward remainder, the teacher reported, "These children have remembered the chief parts of the film better than they remember a story told to them." Naturally, little detail remains. Practically all the children mention the same three points, the visit to the flint mine, Fleet killing the deer, and the feast. The interest of the last two scenes to children is obvious. There seems no special reason for their memory of the flint mine beyond an explanation at the time of the tools used, and many other things were explained that had been forgotten. The children's marks were average. Of eleven children, six retain the same grade, four children in B, one in C, one in D. Two deteriorate, both from B to C. Three improve, one from C to B, two from D to C.

256. Experiment 68. Standard II. in the same school, 32 children aged 8, also saw this film. The teacher took a discussion lesson with the class. She found that the film had been too hurried for the children. They had not been able to read the sub-titles for themselves, and could not always hear the verbal description. They had gained a more intelligent grasp of the film than the younger class, and asked more questions, *e.g.* "How was the fire lit?" "Were there elephants then?" "Did they grind corn?" The class had previously studied the period, but learned from the film many new points, such as the method of making canoes and baskets; they were surprised to hear of pedlars in the Stone Age. The duller ones, like such children in Experiment 61, confused the Professor and schoolboys with men of the Stone Age. In their first free tests the children chiefly concentrated attention on the barrow, the canoes, the pedlar, the hunting and feast. In the delayed test taken six months later, the children did far worse than usual, though the teacher notes that several who record less facts than usual express themselves more easily and naturally. Her report on this deferred work runs: "On the whole, the impression has remained to a greater degree with the average and dull children than the brighter ones. In the main, the essential points have been best remembered, the narrative portions, *e.g.* the hunting, having left the strongest impressions in practically all cases. One child of quite normal intelligence had so far failed to realise the atmosphere as to speak of sending the deerskins to us for use as fur, another of meeting a 'traveller' from whom he 'bought' things in the 'town.'" An examination of the marks shows the failure of the film. Twenty-one children from all grades of the class score lower marks; eight have their usual grade; one only improves, from C to B.

257. Experiment 69. Almost the same remarks apply to 38 children a year older in Standard III. These children had not had lessons on the Stone Age since they were in Standard I. two years before. The teacher considered that the film would have been more helpful if a preparatory revision lesson had been taken. As it was, she considered from her discussion with the children that the film had made their general idea of the Stone Age clearer than before, but that the class learned little detail. She wrote: "The whole thing might have been shown more slowly to give the children time to look at the details. As it was, they had only time to glance at the central figure on the picture, and details of homes, method of cooking, and so forth were missed. Of this class, too, the teacher noted: "Some of them were far more interested in the Professor and his boys than in the actual doings of Fleet. I think they hardly understood at the time that the story of Fleet was told by the Professor to explain the presence of the skull and axe-head." Even after explanation, confusion remained on this point, as the delayed tests showed. In their first essays, this class stressed exactly the same points as Standard II., though giving more detail. The delayed tests did not reach the average standard of the class for such deferred work, even when allowing for the

long interval of six months. The teacher wrote of them : " The results of the delayed tests on the film ' The People of the Stone Age ' are rather disappointing. The final grade given to each child is, in most cases, lower than the one ordinarily obtained. This is specially noticeable among the backward children, who seem to have very little idea of what they saw. The part of the film remembered by most children is that dealing with the finding of the skull and axe-head by the Professor and his boys, while in many cases the part showing the homes, etc., of the Stone Age people has been almost entirely ignored. Many have not realised the connection between the Professor and the story of Fleet. Among the average children, the parts dealing with the visit of the trader and Fleet's hunting and cooking of the deer seem to be fairly well remembered."

It seemed to me that the bright children had been as little benefited by the film as the duller sections. The scores follow :—

EXPERIMENT 69: DELAYED TEST—38 CHILDREN

Same Grade, 22.	Higher Grade, 2.	Lower Grade, 14.
2 in A	2 C to B	6 A to B
11 in B		4 B to C
2 in C		4 C to D
7 in D		

258. **Experiment 70.** 22 girls and 38 boys aged about 9, in the same school, saw the film " People of the Lake." They formed Standard IV., and had no knowledge of the subject beyond their lessons on primitive man taken lower down in the school. The girls enjoyed the film, were ready to talk about it afterwards, but again had merely a general notion of the story. The teacher reported : " The film showed the details clearly, but not enough time was given to study them." In both first and second tests the interest centres in the doings of the Scout, and the children fail to give many particulars of the lake village and its inhabitants. Actually, in the delayed test, the story of the film was well remembered. On the children's scores the teacher remarks : " Results are in most cases similar to those obtained after questioning the girls on history in the terminal examinations."

259. **Experiment 71.** The boys' master noticed the same points. In the discussion, it abundantly appeared that few pupils had caught the significance of the dress, habits, and customs of the people of the Bronze Age ; the Boy Scout's adventures were of greater importance. The film appeals strongly to boys of this age, so that in their delayed test, taken after six months, many show themselves to have remembered the film better than they do stories. Details of the Bronze Age are, naturally, still very incidental to the story of the doings of Brown. The atmosphere of the Bronze Age is not really caught, though the tale of the film is told

vividly enough. The teacher reported : " The results compared with usual results.

Papers—38.

16 show an improved mark.

18 show no change.

4 show an inferior mark.

The results as a whole show some improvement. The average child shows very little improvement on his usual mark. The dull child appears definitely to have benefited. Individual papers show a variety of tastes. One child only seems to have grasped all the essentials. Few children attempted a description of the man or his village, and these, when attempted, reveal no peculiarities which would distinguish them from any other primitive man or village." The detailed grading is :—

EXPERIMENT 71: DELAYED RESULT—38 CHILDREN

Same Grade, 18.	Higher Grade, 16.	Lower Grade, 4.
2 in A	3 B to A	1 A to B
13 in B	1 C to A	3 B to C
3 in C	11 C to B	
	1 D to C	

This experiment gave corroboration to the view of the value of oral comment. Little oral explanation was given, but the facts thus stressed appear in most of the delayed essays, the pointed prow of the canoe, the leaf shapes of the weapons, the bluntness of the knives compared with those of to-day.

260. **Experiment 72.** The Stone and Bronze Age films were also shown to children aged $7\frac{1}{2}$ to 8 years old in the preparatory department of a Girls' High School. They were prepared for the scenes shown in the Stone Age film, having had a series of lessons on primitive man. After the film the teacher set the following short-answer tests, which were given a few days later.

TEST ON "PEOPLE OF THE AXE"

1. What did the man of the Stone Age use instead of a cup ?
2. What was the house made of ?
3. What was his bed ?
4. What weapons did he use for hunting and fighting ?
5. How did he make them sharp ?
6. What did the men give in exchange for weapons ?
7. How did Fleet kill the deer ?
8. How did the people cook their meat ?
9. How did they eat it ?
10. What did they do with the bones ?
11. What animals did they keep ?

TEST ON "PEOPLE OF THE LAKE"

1. Why was the warrior afraid of the Boy Scout ?
2. What was the man's boat made of ?
3. What was his spear-head made of ?
4. Try to draw it.
5. Try to draw his shield.
6. Try to draw his helmet.
7. What did the Chief do when he met the Scout ?
8. What did the people dress in ?
9. How did they know when an enemy was coming ?
10. What did the enemy do ?

All the 21 children did well on the test on the Stone Age film, the average mark out of 10 being 7.76. They knew less about "People of the Lake," the average mark for this test being 5.9. None of the children drew the spear-head correctly. Few attempted the helmet. For Question 8 all but one answer simply "skins." The children's previous knowledge may partly account for the greater success of the first film, and the fact that it was the first film seen. The teacher also thought the Stone Age film easier for her children to follow than that on the lake village. This appeared in the discussion lesson which she took after the test. Nearly all the children preferred the Bronze Age film ; the fighting appealed strongly ; but they asked questions which showed that they had had some difficulty in following. The teacher's report runs : " The children followed both films with interest. The less intelligent children were a little confused by the introductory scene of the Stone Age film—the excavation of the barrow by the schoolboys—although the brighter ones quite grasped the meaning of the scene. In the same way, some of the children did not understand the part played by the Boy Scout in the Lake Dwellers' film, and seemed to find the illustrations from the history book distracting. The sudden shifting of scene was not easily followed by all, so that they did not properly grasp the sequence of events. For instance, most of the children did not realise the part played by the sentinel, and so did not distinguish between the scenes showing the approaching enemy and those showing the preparations for defence. They all enjoyed this film more, probably because of the more definite action, but they certainly learnt more from the Stone Age film. With older children these difficulties would not arise, but for such young children films, to be educative, must necessarily be very simple."

261. **Recall of Experiments 59 and 61.** In the description of Experiment 61 an account has already been given of the successful results obtained when these two films, " People of the Axe " and " People of the Lake," were shown to children of 9 in a rural Elementary School. Fair success was also reached in Experiment 59, when the Roman Britain film was taken with children of 9 in a country school. There, it has been noted, the few children of 8 did markedly less well than those of 9.

262. The Film is not suited to Pupils younger than 9+. These tests suggest that the film is an unsuitable medium of education for children of 7 and 8. On the whole, little detail is noticed; the change of scene puzzles the children; the action is too quick. Most of the teachers of these young classes asked for slower projection, but the film was taken at far less than the usual speed. It could not have been appreciably reduced without producing a ludicrous slow-motion effect. These young children talk readily enough of the film afterwards, but their very conversation shows that the film was merely a source of amaze and wonder. It confuses rather than brings conviction. History stories seem to be more real to children of 7 and 8 than scenes on the film. In Experiment 66, where the long Roman Britain film was used, the children of 7 had gathered so little from the film that they were bored in the following talks.

263. The Film and Pupils of 9+ and 10+. Better results were obtained in Experiment 59 and more particularly in Experiment 61, the only two experiments with children of 9+. In the latter case, the teacher reported how the children afterwards were interested to read about children of the Stone and Bronze Ages.¹ Yet I am left with the impression that I, personally, would not wish to use the film for the teaching of history to children under the age of 10+, that, indeed, it would be quite early enough to introduce it after the 11+ break. Certainly, successful tests have been made with children of 10.² That is to say, the children enjoyed the films, learned their detail, grasped the story; they asked intelligent questions. But children of this age are in general highly enthusiastic over history lessons. Their history course consists mostly of stories, with suitable handwork and other expression work. The children delight in the tales, retell them fluently, enter into their spirit, propound questions about the lives of the characters, certainly think of these as of flesh and blood. I have in mind history lessons taken with a girls' Second Form aged 9+ and a Lower Third aged 10+ over a period of rather more than five years. The talks after the films with scholars of 9 and 10, though spirited, did not strike me as any more ebullient than those of ordinary lessons. The case is quite different for scholars whose ages range from 11+ to 14+; there the contrast between film-lesson discussion and oral-lesson discussion is marked. It seems to me that it would be a needless sophistication of method, a denial to the child of the exercise of imaginative powers that at the age of 9 and 10 he thoroughly enjoys, to present historical films to scholars of this age, when they already show such an artless and spontaneous interest in the subject. This, however, can only stand as a purely personal opinion, in view of the improved results reported with classes aged 9+ and 10+.

264. The helpfulness of the Film in the more difficult Period following. Later, round about the age of 12 and over, the scholars' outlook changes.³

¹ *Supra*, 234.

² *Supra*, 144-148: *infra*, 273.

³ Cf. *History as a School of Citizenship*, H. M. Madeley, pp. 35-6.

They become more utilitarian, less imaginative ; one cannot but wonder if on this last count we in the schools are not to blame ; the teacher makes greater intellectual demands ; certain facts must be remembered, not always easy to retain ; interest in history tends to a certain extent to wane. Then, as the tests have shown, the film can admirably come to the teachers' aid. But it would be a mistake to introduce it to scholars at too early an age.

CHAPTER XI

THE INFORMAL TESTS IN SECONDARY SCHOOLS

265. The Secondary School has different Needs. The problems of history teaching in the Secondary School are to a certain extent different from those in the schools already considered. The teachers have not to contend with any special difficulties created by their pupils' environment. The pupils, even considering the number of free-place scholars, which happily grows, have on the whole wider opportunities than those in the Elementary School, not only in school but at home. They have often, for instance, travelled a little further afield, seen more places of historic interest. They have easier access to books at school and elsewhere, more varied school equipment. The teacher is a specialist, and his more detailed knowledge of history should enable him to impart greater vividness to his teaching. Even for his younger pupils, does he need the aid of the film? And is the film of any value at all in the Senior Classes, where the more intellectual aspects of the subjects must be chiefly stressed?

266. Arrangement of Chapter. These questions are explored in the following tests. Several experiments carried out in Secondary Schools have already been described.¹ These were conducted with groups equated according to the teachers' judgment. In the present chapter further informal tests will be treated. The experiments are arranged as in earlier chapters according to the films used. Tests with the lower forms are examined first.

267. Experiment 73. In a Boys' Grammar School the Stone and Bronze Age films and "Roman Britain" were shown to successive Junior Forms. I give the teacher's report in full as the best comment on these lessons :—

268. "Report on Stone and Bronze Age Films : Experiment 73.

FORMS IIIA. AND B. : AVERAGE AGE 12

Films : 'STONE AGE'

'BRONZE AGE.'

The boys had a good acquaintance with the Stone Age from work with *A Brief History of Ancient Times* (Ginn). This book does not deal

¹ *Supra*, 102-112.

with the Bronze Age as such, but refers to the introduction and use of metal in Egypt and elsewhere.

Both films, I thought, were good, and evidently produced with great care. The boys gained much from them, and were extremely keen to discuss them afterwards. Personally, I preferred the Stone Age film without the Boy Scout, but the boys unanimously preferred the Bronze Age film, and only two thought they would have liked it better had the Scout not been there. The general opinion was that the contrast between the Scout and the Bronze Age men added greatly to the interest and enjoyment of the film.

The fighting and hunting scenes were most appreciated : a few boys, however, were specially interested in the spinning and weaving. One boy questioned whether the flints were worth the skins—a point producing an interesting discussion. The stopping of the film was regarded very favourably.

Fairly numerous criticisms were offered when invited : the stockade of the Stone Age village was not very good : the finger nails of the ancient men were too well manicured : the Scout would have been killed while waving his side on. A question on how the spears were thrown at the Scout so accurately led to a discussion of the 'faking' of such events in a film.

Both forms wrote essays on 'A Day in the Life of a Stone Age Man,' which showed that a vivid impression of Stone Age life had been obtained. IIIA. had done similar essays a few weeks before, and the second attempts showed in most cases a distinct advance upon the first—information from previous school work and from the film being harmoniously combined.

269. Report on 'Roman Britain' : Experiment 73.

FORMS IVA. AND B. : AVERAGE AGE 13

Film : 'ROMAN BRITAIN'

These forms had studied the development and life of the Roman Empire without a detailed study of Roman Britain, which had been omitted partly owing to shortage of time and partly in view of the showing of the film. The scenes of the film were good and full of interest, but the film as a whole seemed to me seriously to lack coherence. The response of the boys was most vigorous, and every one was eager to discuss and comment upon it. The most valuable comment, I think, was that of the boy who said that the Britons before the Romans came were far more civilised than he had thought—making cloth, baskets, and pottery. The impression is probably common that the 'Ancient Britons' were much the same as 'Cave Men.' The processes of spinning and weaving caused particular interest, and with the aid of wool just ready for spinning we were able in class to clear up misapprehensions about these processes. A criticism offered was that the spear was not thrown at the boar with much force. The picture of the revolt was said to be taken from the film of 'Boadicea.'

IV A. wrote essays on 'Would you prefer to have lived in Britain before the Romans came or after?' The film was not supplemented by text-book work nor by class work before the essays were written, and the result should give an indication of what the film can do by itself. The essays were disappointing; they were not very full, and showed partial memory. Possible reasons are:—

- (1) The film was shown quickly.
- (2) The film lacked coherence.
- (3) The film is not a sufficient basis by itself for good critical work.

I am fairly sure that the study of similar materials from a book would have produced a better result. The working over of the ground first by a teacher aware of the contents of the film, such as would normally take place, would have made a considerable difference. On the other hand, it must be recorded that after the essays were written we had an excellent debate on the essay subject at which nearly all the relevant points were made by one speaker or another.

IV B. wrote essays on 'A Roman soldier's account of Britain,' which were well done on the whole. The film, as one might expect, stimulates good descriptive work."

270. Scores in Experiment 73: Form III. Comparative analysis of film and usual score gives these results:—

"STONE AGE": IV B.—11 BOYS

Same Grade, 4.	Higher Grade, 5.	Lower Grade, 2.
1 in A--	1 A-- to A	A to A--
1 in B--	1 B-- to A	A to B
1 in B	2 B to A--	
1 in B--	1 B-- to A--	

"STONE AGE": III A.—24 BOYS

Same Grade, 8.	Higher Grade, 11.	Lower Grade, 5.
1 in A	6 A-- to A	1 A to A--
3 in A--	1 B+ to A	1 A-- to B
4 in B	3 B to A	3 B+ to B
	1 C+ to B--	

271. Scores in Experiment 73: Form IV.

"ROMAN BRITAIN": IVB.—13 BOYS

Same Grade, 4.	Higher Grade, 6.	Lower Grade, 3.
1 in A—	1 B+ to A	1 A to A—
2 in B	1 B+ to A—	1 B+ to B
1 in C	1 B to A	1 B to C
	1 B to A—	
	1 B to B+	
	1 B— to A—	

"ROMAN BRITAIN": IVA.—20 BOYS

Same Grade, 9.	Higher Grade, 5.	Lower Grade, 6.
5 in A	3 A— to A	1 A to A—
3 in B	1 B+ to A—	1 A to B—
1 in B—	1 B— to B	1 A— to B+
		1 A— to B
		1 A— to C
		1 B+ to B

272. **Experiment 74.** Shell C in a London Secondary School, 23 boys aged 11 years 9 months, saw the Stone and Bronze Age films. After some discussion between the teacher and the class these questions were set the boys :—

1. Did you like the films you saw ?
2. Did you learn anything fresh from them ?
3. Was there anything of *very* special interest in the films ?
4. Can you suggest any way in which these films might have been improved ?
5. Would you like films like these to form part of your regular history work ?
6. Can you suggest any historical events which would make good films, and which you would like to see ?

All the class said they had enjoyed the films, and would like such pictures to form part of the regular course. 7 had learned "a lot" of fresh matter, 3 "a little," 11 gave a mere "Yes" in answer to this question, and 2 say "not very much." All of them give replies to the question on points of special interest. 7 liked to see the actual dress and arms of the warriors of the Bronze Age; 5 are interested in the fight, 5 in the houses. 15 were attracted by the early manufacturing processes, "the way they make things," and give instances of making weapons and pottery and of spinning and weaving. Criticisms were few and beside the point; one or two say the picture was not clear. One, like younger children, was evidently confused by the juxtaposition of modern Boy Scout and Bronze Man. He points out when asked to

criticise that "Scouts weren't organised then." In answer to Question 6, they chiefly suggest battle scenes. The master reported :—

"Early Britons. The most prominent factor in the attitude of the boys towards this film was the idea that they had had an entertainment—a film was such a novelty in their school work, and was so associated in their minds with amusement that they mostly regarded the thing as a 'treat.' This, of course, is natural, and has little bearing on what their attitude would be if such films were shown regularly. There is no doubt, however, that the historical aspect of the film, as apart from the mere idea of 'going to the pictures,' did impress itself on a large section of the class. Some boys had particularly noticed points in which the film appeared to differ from what they had been told in class—*e.g.* the build and complexion of the bronze-using men, and some were comparing their memories of the bronze axe of the film with pictures in their history books. There is, I think, more scope for real educational work in films dealing with periods more near to our own time and yet differing in customs and costume—a film of the Norman Conquest or the Crusades would, if well staged, have done more to give the class ideas that they could but dimly realise from the books."

273. **Experiment 75.** Reels I. and III. of the Roman Britain film were shown to Form II. of a Girls' High School in Leeds, children whose average age was 10 years 5 months. The film was shown with some comments. The children were highly interested. When they heard that there was a third reel, they begged to be allowed to stay and see it, although closing-time was reached. The teacher took the follow-up lesson two days later :—

Teacher. What did you specially enjoy in the film ?

Answer. The war between Romans and Britons.

Teacher. Was it any clearer than before ?

Answers. 1. Yes. You saw the people. You didn't have to imagine them.

2. I liked the standard.

Teacher. You knew about that before.

Answer. Yes, but I liked to see it.

Teacher. In the first part of the film, what did you learn you hadn't known before ?

Answer. I saw the mud houses and the dress and the furniture.

Teacher. Did you see anything unexpected in the view of the village ?

Answer. The Chief's house. It had a corridor.

Teacher. Was that a surprise ?

Answers. 1. Yes. I thought it was just like the others only bigger.

2. It had steps to it.

3. I didn't think they would have a chair and a couch.

4. I was surprised at his wife and daughters. I thought they would look like heathens.

5. I didn't know they unplaited their hair when they were sad.

6. I didn't know about making bowls.

Teacher. But we have read about that. Didn't you know before ?

Answer. No. The book does not make it as clear as when you see it.

Teacher. How many could make a bowl like that for themselves ?

Answer. All the class could.

Teacher. Show me with your hands how you would do it.

Answer. A child describes making the rolls, "curling" them round, and shaping the inside.

Teacher. What did you learn that was new in the second half, or what did you like ?

Answers. 1. I liked seeing the Roman soldiers marching.

2. I didn't know the officers rode on horseback on the march and the ordinary soldiers walked.

3. I didn't know as well as that how they dressed.

Teacher. There is a picture in your history books. Did the film make it clearer than the picture ?

Answer. Yes.

Teacher. Tell me what the soldiers wore.

Answers. 1. Sandals with straps.

2. White trousers half-way down the leg.

3. A leather tunic.

4. A helmet.

5. Armour.

Teacher. What was the armour like ?

Answer. It was a sort of tunic with strips of steel.

Teacher. Where were the strips placed ?

Answer. Over the shoulder and round the waist.

Teacher. Let us talk about the helmet. When did the soldiers take them off ?

Answer. On the march till they were going to fight.

Teacher. How could you tell an officer's helmet ?

Answer. It had a plume.

Teacher. Did you know that before ?

Answer. No.

Teacher. Tell me what the helmet was like.

Answer. It had a sort of shield over the forehead to pull down over the eyes.

Teacher. Was anything else fitted on the helmet to protect other parts ?

Answer. It had a piece over the neck, and pieces to come down from the ears like on a swimming cap.

Teacher. What other weapons had the soldiers ?

Answer. Shields.

Teacher. Did you know that before ?

Answers. 1. Yes.

2. They had little swords.

Teacher. Where did they wear the sword ?

Answer. On their shoulder, hanging down at the side.

Teacher. Which side ?

Answers. 1. Boy. Left.

2. Girl. Left.

(The teacher had to explain that it was worn on the right, and why.)

Teacher. Why do you think the Romans won ?

Answers. 1. The Britons ran about so. The Romans stood still so they won. They did not get tired.

2. The Romans were more civilised.

Teacher. What do you mean when you say more civilised ?

Answers. 1. They had stronger shields and armour.

2. They were more experienced.

(The teacher felt that the children were trying to express training and discipline, and helped them out.)

Teacher. What good weapon had the Britons ?

Answer. Chariots.

Teacher. What made these dangerous ?

Answers. 1. The horses.

2. The knives on the wheels.

Teacher. You knew about those before, didn't you ?

Answers. 1. Yes, but I liked to see the knives flashing.

2. I didn't know the knives were like that. I thought all the spikes on the wheels were sharp like knives. I did not know the knives stood out.

Teacher. But there is a picture in your book. Look at it.

Answers. 1. I hadn't noticed how the knives went till I saw the wheels moving in the picture.

2. The Romans had many chariots. The Britons' chariots are like those only they have knives. Those knives would cut your legs.

Most of the children best liked the battle scene. One liked the interior of the Chief's house, one the standards, one the Druid on the altar. They were interested to work out problems. For instance, they were asked why the intervallum was left, and gave two correct suggestions, that it was a space for drawing up the army and provided safety, though from "the bows and arrows of the enemy." The most striking fact that emerged was that the film had driven home several points that the abundant still illustrations seen by the children had failed to teach. The teacher reported : "The children certainly gained much from seeing the film that they would not have gained from their usual lessons. The Britons and Romans *really* lived for them, I think, for the first time. When the film had been stopped and was set going again, the figures, instead of being stationary, began to move, and that, I think, was what was happening to the images in the children's minds. The film was a means of correcting faulty ideas in the child's mind. One child remarked that she thought the Britons were "much more heathen" than they appeared on the screen. It was also a means of adding to the knowledge they already possessed of, *e.g.*, the Britons' weapons and armour, British houses and customs, pottery-making, Roman weapons and armour, Roman camps. I think films would be a useful supplement, but a supplement only, to ordinary teaching for children of this age. (If too frequent use were made of them I think the children would not make sufficient use of their imagination.) I did, however, think it a matter of regret that the pictures of fighting were the most popular with the children. I should like best for children of this age pictures showing the social side of history."

274. **Experiment 76.** All the reels of the Roman Britain film were shown to Form III. Lower A, 34 girls of average age 11 years

8 months, and III. Lower B., girls aged 11 years 3 months, in a Girls' Secondary School in Bedfordshire. Both forms had lately had several lessons on Roman Britain. The girls were asked what new points they had learned from the film, and instanced many details of military equipment, what the drawbridge was like and how it worked, that Britons worshipped tree spirits, that mourners unplaited their hair, that the Chief lived in a more civilised fashion than they had imagined, that his house wall was hung with skins, that British women watched the battle, that the Romans formed a wedge formation to break through opposing ranks. These things were discussed, and then the children invited to ask any questions they wished on the films. Many points were raised, most of them already instanced from other classes. One child criticised the film for showing slaves always treated with extreme severity by the Romans; she argued from earlier knowledge that this was not the case. Another thought the Chief's womenfolk "too gentle." An interesting question was, "What were the strings of the harp made of?" It again aptly illustrates the fact that films quicken intellectual curiosity rather than the reverse, as so many people fear, and that the film has a greater stimulating effect than the still picture. I have often talked to children of this age of minstrels and harps and shown them pictures, but never had this question put before. Seeing the strings, as it were, in the round, plucked by the minstrel's fingers, made the child wonder if they were of gut or if the Britons made metal strings. I confess that my own curiosity had not been aroused on this point, but the matter was looked up and the child answered later. Such points are not insignificant. The degree of civilisation of the Britons is involved, and discussion of such questions leads the children to realisation of the fact that the tale of history unfolds from research, archaeological and literary. The 40 minutes' period was over, without time to do more than deal with the children's questions.

The history mistress took a follow-up lesson with III.B. and with similar results. She thought that the films had been "decidedly stimulating," and that the children had observed a large number of new points. "It seems to me that it (the film) would be a most valuable aid to ordinary oral teaching, particularly to children of this age."

275. Experiment 77. An interesting test was tried with boys aged 12 years 11 months to 13 years 3 months, in a Bedfordshire Secondary School. Much use is made in this school of contemporary documents, and the Roman Britain film was shown to boys who had been using one of Blackie's English texts, *Britain and Germany in Roman Times*, to get their picture of the period. The master took the follow-up lesson. The class was asked if they wished to discuss anything in the film. They expressed their surprise that the dress of the Roman women was not so very unlike that worn to-day, and that the dress of the British Chieftainess was quite similar to that of the Roman women: opening remarks unexpected from a class of boys. They then questioned the truth of the representation of the battle scene, the chariots' approach to the enemy without

the hurling of missiles, the advance of the Britons in relays, the small number of Britons. They regretted the lack of close-ups for detailed examination of equipment. Was it correct to have iron sickles? Wasn't the crop of corn too luxurious? Would corn grow so high in those days?

The boys had their texts with them. The teacher then asked if the film made Caesar any easier to understand. The boys said it made the equipment of the Romans plainer; the difference in the uniform of centurions and troopers was made clear. One boy said the film made the scene in the cornfield, which they had read in Caesar, mean more. The class found and re-read this extract, referring to a British ambush in a wood and surprise attack upon the Romans. The boys pointed out that the film showed the Britons gathering secretly in the woods. One boy objected that most of the country in the film was too open for surprise attacks. A further passage had been discovered: "This is their order of fights in waggons. First they ride about on all parts casting off darts, and oftentimes with the terribleness of their horses and the rattling noise of their wheels they break the array. . . . And they are come to such perfectness by daily practice and exercise that even in sleep and falling places they will stop their horses running a full gallop, guide them and turn them in a short room, and run upon the verges, and stand steadfast upon the beams, and quickly recover themselves back again into the waggons. With the which things, while our men were troubled for the strangeness of the sight, Caesar came in very good season to the rescue." The class again remarked that no darts were thrown from the chariots in the film, "And the Romans weren't frightened." The teacher asked what that showed, and suggestions were made, first that by this time the Romans were more accustomed to barbarian methods, and, in the second place, that their discipline was greater than their fright. There was considerable discussion of equipment, length of spear, shape of shield, type of foot-gear. "In the film they had straps on the legs. Didn't they wear a sort of boot?" These matters were looked up in Quennell's *Everyday Life in Roman Britain* as they arose.

It was obvious that the military scenes had chiefly seized these boys' attention, though one expressed his surprise that the Britons could make pottery. He thought that they had no idea of it at all until they learned the art from the Romans.

The teacher considered that the film could well contribute to his special aims in history teaching. The Wolfe film was shown to a higher form in the same school. The reports on both experiments are given here, since in this way the master's point of view the better appears.

276. Report : Experiment 77.

"THE HISTORY SYLLABUS AND METHOD. We regard history as a vast treasure house of human experience, from which each human being may take what is most suitable to his intellectual needs and germane to his tastes. For this reason the subject must be treated selectively and—ideally—the pupil must be encouraged to make that selection himself.

Therefore, we provide many and varied books, and aim—on a basis of an irreducible minimum of knowledge—at arousing in the boy a desire to read as well as a capacity to criticise, to select and connect facts together.

THE PLACE OF THE FILM. In a syllabus of this type the film can, therefore, have a very definite, if somewhat subordinate, place. We need it : (a) to stimulate interest in history as a live subject ; (b) to emphasise such aspects of life in the past as can best be understood when a whole scene is reconstructed ; (c) as a medium to aid the criticism of contemporary accounts, *e.g.* Caesar's expeditions to Britain and his descriptions of the Britons. In the last respect—(c)—they may have a peculiarly striking value.

Films in general exact a more immediate response from duller or more volatile children, who have not the grasp or stamina necessary for literary work ; and they convey atmosphere swiftly and comprehensively, when history is one of the most obvious subjects lacking—in its ordinary methods of teaching—any really comprehensive understanding by the pupil.

On the other hand, films lend themselves to the creation of a condition of passive receptivity in the child,¹ and can only be regarded as an occasional—though very essential—stimulus, without being reliable as continued aids to teaching.

Of the two films which we saw (*i.e.* 'Roman Britain' and 'Wolfe'), 'Roman Britain' was a bad film, but it had the effect of making a lasting impression on IIB. Form. They remembered details ; they were stimulated ; and they were compelled, by their observations, to face Caesar's own account of his expedition to Britain with a clearer eye for discrepancies or inaccuracies, *i.e.* their ability to use material critically and selectively was definitely encouraged. The Wolfe film was thought good, but it had not the value of the other. This was chiefly due to the fact that it only recapitulated facts which most boys are quite interested enough to read for themselves. The detail was good, but the story had plot rather than comprehensiveness ; and I am inclined to believe that it is in this comprehensive presentation of detail that the main value of the film lies.

IVA. (average age 14.5) saw 'Wolfe.' They wrote an essay on 'In what ways is a film clearer and more provocative than a book or an ordinary lesson ?' In this, the replies emphasised the value of the dramatic in history, of the film's comprehensiveness ('more in the picture'), its definiteness, reality, lasting effect, and the appeal made to a few by the sight of the actual characters like Wolfe and Pitt. One youth thought the films had no real value. Accuracy of dress, speed of presentation of the story, and economy of time made a great appeal.

IIB. (aged 12.11-13.3) saw 'Roman Britain.' Their observations were more diffuse. Only parts of the film remained in their memory, as there was no thread or plot on which to centre their intelligence. In consequence, they picked out such bits as army life and armour, the Chief's

¹ The investigator denies the truth of this criticism, as contrary to the results of the tests, cf. *supra*, 227, 230-1, 233.

funeral, customs, etc., and ended by confessing that they could only remember the Britons' method of fighting because they had read about it in Caesar. They asked for the film to be repeated, when, they explained, they felt they could really hope to get hold of it. These replies were either written or elicited spontaneously later in the same lesson."

277. Success of Experiments in Junior Forms. With the use of the Wolfe film we come to experiments with older boys and girls. We must therefore notice in passing that all the teachers who participated in Experiments 73 to 77, and this included tests with ten classes of children aged from 10+ to 13, felt that the film made definite contributions to history teaching. Far more criticism of the films was anticipated from Senior scholars—and received.

278. In Experiments 78 to 80 the Wolfe film was used without preliminary lessons on its subject matter. A Form IVB., aged 14+, saw the film as an introduction to the study of the conquest of Canada. They had previously had lessons on the colonisation of the Tudor and Stuart periods, the rivalry of France and England, the outbreak of the war of the Austrian Succession, and later hostilities in America. The teacher's report runs :—

“ **PLAN OF LESSON.** To elicit information about the conquest from knowledge gained by the children from the film.

PLAN ALTERED. The lesson was begun, and the pupils were so bursting with details about the film scenes, the kind of ships, the men wearing wigs, Pitt's planning, the appearance of the sailors, etc., that we found ourselves lost in a maze of descriptive detail, jotted down in note form on the blackboard, without any clear thread of story. In the enthusiastic discussion of the film we discovered that some children had noticed details of dress that others had not. We deserted our original plan in order that each pupil might write down all that he remembered that he had seen.

NEXT LESSON. A clear idea of the story had been retained, and the children emphasised Pitt's planning, Vaudreuil's incapability and its effect on Montcalm; the capture of the Foulon and the opening out of the road to our main forces, the arrival of the British Fleet before the French.

MY OPINION OF THE VALUE OF THE FILM. I am certain that it was of great value. The pupils got the essentials, the reasons for our success and the ‘atmosphere,’ conditions on board ship, dress, etc., the difficulties in scaling the cliffs, the kind of fighting, that Quebec was a walled town with a drawbridge, etc. The papers attached give no idea of the ‘liveness’ of the lessons. It should be remembered that the film was the children's introduction to the story.”

279. Experiment 79. Forms VA. and B., a class aged 15+, in a Girls' Secondary School in Leeds, saw the film when they had taken the

general causes of the Seven Years' War and the war in America up to the campaign of 1759, which the film shows. Oral lessons followed. The discussion showed that the girls had grasped the story from the film. The teacher wrote of the lessons: "The response in class was very good in the A. form and quite good in B. The particular points of interest seem to have been

- (a) Climbing the Heights.
- (b) Wolfe's farewell letters.
- (c) The march along the Foulon Road.
- (d) The steady English battle line.
- (e) The dress.
- (f) The awaiting the reinforcements in the spring of 1760.

The interest of the children was undoubted, but they saw immediately the fact that films could never take the place of teaching, for only scenes of action such as this could be used. This information was volunteered without being asked for. Their chief criticism was in the confusion of the colour of the soldiers' uniform. Usually, the French uniforms were white and the English coloured, but some French officers' were coloured, and also, I believe, the gun detachment." The false assumption here that films must necessarily be of this episodic nature, showing only spectacular action, is discussed later.¹ Both classes wrote free essays on the film. These were very creditable performances, but no appreciable divergence from normal grading occurred. In discussing the value of the film, the teacher wrote: "It gave a picture the impression of which was much more vivid than a lesson, *e.g.* since seeing the film I have given an examination, and the answer to the question on the Seven Years' War in America in some cases resolved itself into a description of the film to the extinction of any previous events in the war, so anxious were they to get to the tale. I have had, therefore, to adjust a sense of proportion among the less intelligent."

280. **Experiment 80.** Forms VA. and B., boys aged 14, in a Secondary School in the north, saw the Wolfe film. This is the teacher's impression: "These forms had no previous acquaintance with the subject matter of the film so far as their recent school work was concerned, although the subject is one which most boys know something about. It was an excellent film, making full use of the advantage of a good theme. The attempt to show Pitt as the master mind behind the campaign appeared to me to be quite successful, but does not seem to have impressed the boys. The accuracy of the film was noteworthy: one point alone occurs to me that was not quite clear, *viz.* that the boats set off *downstream* to the Heights of Abraham. The film was vigorously discussed at the next lesson period. In both forms surprise was expressed at the open fighting on the Heights of Abraham, the conditions of the last war in France evidently constituting their chief idea of war. Incidents that

¹ *Infra*, 324, 400.

attracted special attention were the climbing of the cliff, the conflict between Montcalm and the Governor of Quebec, the marching of troops on the horizon, the death of Wolfe, and the sighting of the flagless ship from Quebec. It was noticed that Wolfe looked ill, and the fact that a great many English troops died of disease in the second siege was well remembered. One boy asked why the English ships were not stopped before they reached Quebec in the first place. A very backward boy in VA. next day reproduced on the blackboard the map showing the position of English and French in North America with great accuracy, which he would not have been able to do from the study of an atlas. The essays generally showed a good grasp of the salient facts. They were written after a discussion of the film in class." Actually, in the grading there is little variation from normal. IVB. does slightly worse, IVA. slightly better than usual.

281. Experiment 81. In eight cases the Wolfe film was used after preliminary lessons. First, the film was shown to three forms in a Boys' Secondary School :—

- (a) To Form V. Upper, 16 boys aged 15 years 8 months, the examination form, who had studied the subject earlier in the year.
- (b) To Form IVA., 21 boys aged 14 years 9 months. The Conquest of Canada had been reached in the ordinary syllabus, but not yet taught.
- (c) To IVB., 17 boys aged 14 years 11 months, with whom the Conquest of Canada had been taken in the previous lesson.

The Headmaster, who was present during the showing, considered that such a film would be useful, chiefly to pull together material already known from other sources. He had noticed the boys during the film. They were completely absorbed. He was impressed with the amount of concrete detail given by the film in 45 minutes ; it was impossible to cover the same amount of ground orally in the time.

The same test was set to all forms :—

- 1. In what respects do you think the film helped you to understand the " Conquest of Canada " ?
- 2. What part did the navy play in capturing Quebec ?
- 3. Give the names of the French and British officers mentioned in the film.
- 4. What were the relations between the French Governor-General and the French General ?

The teacher also discussed the films with all the classes, and came to the following conclusions : " Most boys found the film very interesting, and said they had learned something, usually that they had a more vivid mental picture of the capture of Quebec. Details especially were noted, these details varying with particular boys, some noting details of incidents, others of dress, others of the bearing of the personages. Several boys, mostly the older boys in Upper V. and the better boys in IVA., criticised

the film from the point of view that it only showed the capture of Quebec, and that it gave no indication of the general strategy that led to the conquest of Canada. The boys in IVB. were more ready to discuss the film, and it appeared to have had a greater effect on them, especially from a 'mental picture' aspect, than on the others. More criticisms came from Upper V. and IVA. than from IVB., and several boys in each of those forms questioned the accuracy of the opening scene between Pitt and Anson. Boys in Upper V. said that diagrammatic maps ought to have been used. With regard to the part played by the navy, the importance of the navy taking the troops to the Foulon and the arrival of the ship at Quebec in 1760 was noted, but it is doubtful if the film made the boys realise the real significance of the work of the navy in the conquest of Canada. Only one boy denied the film's educative use. Even the boys who criticised the film because it only depicted one incident, thought that the vivid picture they had of that incident would help them to remember the whole conquest of Canada. The number of spelling mistakes in the spelling of proper names will be noted. Personally, I think the experiment was very useful. Undoubtedly, the boys were deeply interested, and I anticipate good answers to a question on the conquest of Canada in the terminal examinations. I was much struck with the eagerness of IVB. to discuss the film. Seeing the film was evidently more palatable to them than hearing about the plan of campaign. Of course, it must be realised that every boy knew something about the story. It would be interesting to see the effect of it on a much younger class that had not heard of Wolfe."

The delayed test, taken six months later, emphasised the gain derived by the duller boys from the film, and also the loss of those usually bright. The general report on the delayed test follows, and an analysis of the scores.

"(1) The essential facts of the film have been remembered very well. Some boys remembered many details, and most of the details were remembered by some boy or other.

(2) The film was relatively of more value to the boys in the lower groups, as classified by the usual tests, than in the higher. The boys in the lower groups remembered more of the minor incidents. It will be noticed that only two boys in A group maintained their position. X and Y, IVA., whom I regard as two of the most intelligent boys, did badly in this special test. (They fall from A to D and C respectively.)

(3) This test seems to bear out my experience of the use of black-board and other illustrations—the lower and younger forms are, relatively, very much more impressed than the higher and older. Those boys who are usually regarded as of a lower mentality, because of their inability to respond to a written test, often respond more readily to questioning about pictures and ordinary films; therefore, the teacher has to use several different devices in any one form in order to impress all the diverse mentalities. The cinematograph would be an addition to the methods already used for illustrations. Some of the older boys, in a discussion on the permanent impression of the film shown, said that it could not teach

the history of the Conquest of Canada, because the film is, and must be, episodic,¹ while history is more than a mere sequence of events."

EXPERIMENT 81 : DELAYED TEST : IVA.—21 BOYS

Same Grade, 6.	Higher Grade, 7.	Lower Grade, 8.
1 in A	2 B to A	3 A to B
1 in B	2 C to B	1 A to C
2 in C	1 C to A	1 A to D
2 in D	2 D to C	2 B to C
		1 C to D

IVB.—17 BOYS

Same Grade, 6.	Higher Grade, 10.	Lower Grade, 1.
1 in B	2 B to A	1 C to D
2 in C	2 C to B	
3 in D	3 D to B	
	3 D to C	

V. UPPER—16 BOYS

Same Grade, 9.	Higher Grade, 4.	Lower Grade, 3.
1 in A	2 B to A	1 A to B
4 in B	1 C to A	2 C to D
1 in C	1 D to A	
3 in D		

282. **Experiment 82.** Strong criticism of the film came from a class of 16 girls aged 15 years 5 months, an Upper Fifth Form in a Girls' Secondary School in Bedfordshire. In the discussion lesson, 10 of the girls said they had enjoyed the film ; 6 thought it was a waste of time in school, though it was quite pleasant to watch. This class is taught on the principle that they shall not be told anything that is contained in an easily accessible book. Hence the six girls felt that they could have more profitably spent the time in reading. The teacher said that they were average members of the class and not girls inclined to cavil. Later, in a private discussion with the teacher, the girls came to the conclusion that films showing social background would be useful, but not films showing a single incident like the Wolfe film. Most of the class thought that the film had

¹ *Infra*, 324, 400.

been useful as giving details of costume, site, etc., and in impressing the facts they already knew. The majority had learned a few new points concerning events, that Vaudreuil was Governor-General, that Montcalm was aware of the necessity of guarding the Foulon. The class offered no detailed criticism of the film, but when asked for their views on its character portrayal, one girl said that she had not expected Vaudreuil to be so "miserable." Another girl was disappointed in the presentation of Wolfe. She had imagined him of much more striking personality; the film did not suggest to her a man of any force. The maps were considered useful, particularly the last, darkening in new British territory. The girls were surprised at the thin line of battle. They failed to suggest the reason for Wolfe's order to withhold fire till the near approach of the enemy. They had learned from the film the events of the winter 1759-60. The group of six said they had learned nothing. There were some points they might have learned, but missed. None of the class, for instance, could tell what was Anson's office. The only suggestion offered, Admiral of the Fleet, was not accurate. Only one in the class could correct this mistake, and knew that Saunders was the Admiral. Perhaps the girls had not taken the film as seriously as might be because it was shown to all the Upper School. Mass showing proved no deterrent to close observation in the other cases where it occurred, but on the other occasions stress was laid on the fact that close observation was expected.¹ Without some such warning, mass exhibition may lead to the half attention given to the public cinema. The Headmistress pointed out that unless the girls were put on the *qui vive* to notice the film closely in anticipation of a discussion, girls of this age would not be all eyes on the screen like the smaller children.² They would be interested, for instance, in my personal appearance, and wonder what it felt like to be perched up on raised benches operating a machine. On the whole, the girls knew the story of the film, but there was no suggestion that it had been of very special help. The teacher's comment is: "I think that these older girls should be encouraged to read as much as possible. They do not need the film as a stimulus, but I do think that a social background film shown occasionally would be useful to them."

283. Experiment 83. In this same school, a class of 15 backward girls, IV. Upper B, aged 14 years 11 months, had seen the film at the same time as the others. Their year's syllabus was from 1688 to 1815, but they had not reached the Seven Years' War. They had never had formal teaching on this period. The girls' response in the follow-up lesson to questions on the film suggested that it had been entirely useless to them. They had gathered something about Pitt and Wolfe. Several were completely confused over the doings of Montcalm and Vaudreuil. They could reproduce the first map on the blackboard, but had learned little of the disposition of the troops on the St. Lawrence. They were very uncertain

¹ *Supra*, 144. 200 children were present; 161, 166, 175, 176, 278, 288.

² *Supra*, 274. Experiment 76 was taken with Junior Forms in this school.

about events after the English entry into Quebec. Yet this was the final dialogue in the lesson.

Investigator. This film was rather long and difficult for you. Do you think you really learned anything from it ?

Answer. Chorus of—"Yes."

Investigator. You think films would help you to learn your history, then ?

Answer. All the class, "Yes."

Investigator. Why ?

Answer. Chorus, "We can't imagine it from books."

Investigator. But you haven't found it easy to remember the film. It might have been easier if you had had this lesson first. Hands up those who would have liked a lesson on the attack before they saw the film ?

Answer. No hands raised.

Investigator. Well, why do you like the film first ?

Answer. One child said : "All the time we were having the lesson, you kept saying, 'you remember.' If we had the lesson first, you couldn't say 'you remember,' and we shouldn't be remembering pictures as you explained, so that we shouldn't get it clear."

The class confirmed this statement. The girls wrote free essays on the film at the time and seven weeks later. On the whole experiment the teacher wrote :—

"October : *First Test.* The amount of information given by the film was more than I give in one lesson. Consequently, the recapitulatory lesson also covered more ground. The written work done after the lesson showed confusion in many cases. The results were not actually better than the written results that I get, but I believe that they were better than the written results that I should get if I tried to do so much in such a short time.

December : *Delayed Test.* I feel that the girls have remembered more than usual after an interval. What was grasped in October is on the whole retained. I believe that to these dull, non-literary people the film, judiciously used, would be of incalculable value.

ATTENTION. It is difficult to get *real attention* (I do not mean silence and apparent listening) for a whole lesson from such girls, but every girl craned her neck and did her utmost to follow during the whole time that the film was shown. That in itself was good, and must, if it happened constantly, lead to good results. They ought to be able to work more quickly.

IMAGINATION. The girls themselves said that when you discussed the lesson with them afterwards they could 'imagine' as you talked. I believe that that was a very real gain to them, though we could see so little result. The other day, after I had given a lesson on the '45 I read the Ballad of Moy Castle, but several of these girls were quite bored with it. A film would have had the desired effect.

GRASP AND RETENTION. I believe that with a dull form the best result would be obtained by showing the film twice : film—lesson, preparation—film, with a period for preparation, reading or drawing (map) between. After the second film a written preparation might be given."

284. Experiment 84. This teacher also took a follow-up lesson on the film with 24 girls aged 14 years 6 months, a bright class, and said of them : " This class enjoyed the film. The work was entirely new to them. On the whole they grasped the main outlines well. These girls are able to read. I believe that they would obtain greatest benefit from reading first, asking questions on difficult points, and then seeing the film. It ought not to be necessary to show the film twice." Her general conclusion from work with the three classes is that the film, rightly used, " can be most valuable as an aid to the teaching of history."

285. Experiment 85. Several forms in a Girls' Secondary School in Bradford also saw the Wolfe film. None of the girls adversely criticised the film, though the oldest girls were aged 15 years 6 months.

(a) Form Upper IIIA., an intelligent class of 35 girls aged 14+. This class was very excited over the film, and broke into spontaneous applause at stirring moments, as when the first English sail appeared in 1760. They learned the essentials of the story well, as the discussion lesson showed. They had just reached this point in their syllabus. To avoid confusion between Montcalm and Vaudreuil, the film was stopped at this first meeting. These girls had missed the usual details, were not clear about Anson and Saunders, nor over the first two maps. The teacher thought the response very good.

286. Experiment 86. (b) Form IVB. was a small class of 8 girls, aged 15 years 6 months, of barely average intelligence. The teacher had previously taken with them general lessons on the relation of the English and French in America, but the details of the capture of Quebec were only known to them from reading their text-book. In the discussion lesson special attention was paid to the girls' idea of the characterisation of the leading figures since the girls of Experiment 82 had been so scathing on this point. The class pointed out that Wolfe's courage was emphasised; he fought when ill. He was considerate, thought of his friends on the eve of battle. The disciplined spirit of his men showed his qualities as a commander. The scene at his death showed that he thought of his country before himself. Of Montcalm, they had remarked the affection shown him by the people, his eagerness to serve France, his grasp of difficult situations, shown by his desire to defend the Foulon; he understood the position and dangers of the French better than Vaudreuil. The teacher said of the discussion : " I think that it was quite evident that the children had a much clearer idea of the characteristics of the English and French leaders than they had before. In a film of this type it is not possible to deal with all the points of their character, but enough were shown to make them living men and not mere names. The cool courage and determination of Wolfe in spite of illness, the enthusiasm of Montcalm, were far better realised by the children than if they had been merely told these were features of their characters." The girls had found the maps

helpful, especially the two animated maps showing the march of the armies and the new English lands. As part of the lesson, they wrote down what new information they had gained from the film and what other help it had been to them. Under the first heading, five mentioned the importance of naval relief, four the jealousy between the French leaders, four "what the battles were like in those days," three the importance of Pitt, and three the delicacy of Wolfe. Many other individual points were made, one girl having noted, for instance, "the look of the drawbridge, which was like a big slab of stone which was drawn up." For the general helpfulness of the film, they instanced many matters of which they had previously heard but which were now clearer, the routes of the armies, the position of the English and French in America, how the English sailed in small boats to the foot of the cliff. The film gave more details. They saw "just where the battle took place," and "the way the people made their plans." Three say they can understand a story better when they see it, three that it is clearer because more detailed; one girl is "sure of having the right picture," one thinks it is "easier to remember." The teacher wrote: "The whole class thought the film clearer than the lesson as the former was more detailed. This is true. I had taken the capture of Quebec as the climax of the French and English struggle, but had not taken details as these were given in the text-book. This shows that children of only average intelligence find it more interesting to see a film story than to read it from a book. The children said that they were able to understand the film better than the book, especially the routes of English and French armies in the diagrammatic map."

287. **Experiment 87.** (c) Form IVA., 22 girls of average intelligence of the same age, 15+, also saw the film. They had had the same preliminary lessons as IVB. Only a very brief discussion was possible with this class. The time was spent in discussing the characters in the film. This class also felt that they had a better idea of the character of Wolfe and Montcalm from seeing the film. Wolfe was shown as a patriot, as a man of much strength of will, yet considerate of others. Montcalm had become far more vital. What they chiefly appreciated about the film in relation to Montcalm was that he was depicted in as attractive and as sympathetic a fashion as Wolfe. They were made to realise that he, too, had qualities as a commander. The girls wrote answers to the question "Did you find the film helpful? If so, how?" The girls reply in much the same fashion as the B. form. The film is more interesting and clear, largely because it is more detailed. Six girls say that the maps make the geographical position more intelligible, five that the difficulties of the campaign become more apparent. They say: "It is easier to remember names of places after seeing them than after just hearing of them." "The film impresses main points as well as showing others." "The characters become lifelike." It is evident that they feel to have gained a greater sense of intimacy with the people concerned in the attack, and a more exact knowledge of the whole campaign.

288. Experiment 88. A fourth form in a mixed Secondary School in the West Riding also saw the film. The average age of the class was 14+. A series of lessons on eighteenth-century warfare had been taken with the children; the teacher viewed the experiment as a test of the film's power of supplying colour and atmosphere as a supplement to the usual lessons. The class was afterwards asked to write down anything and everything they remembered of the film. In marking, one mark was given for each observation. If an inference was drawn about eighteenth-century warfare in general an extra mark was given. The top scores were 47, 45, 40; the average mark 25. The teacher wrote: "The class did gain colour and atmosphere, well worth the time spent in seeing the film. The film impressed on their minds not only the factors of British success but also the details of dress, actual warfare, the difficulties of the sailors in landing, and so forth. The brighter pupils were stimulated by the film, judging by their questions and discussion after it, but the 'tail' of the class did not appear to have noticed anything that aroused their curiosity." Of the delayed test taken five months later, the report runs: "The main points were all retained, Pitt's plans, the inaccessibility of Quebec, the difficulties of the Foulon, the incapability of Vaudreuil, the importance of the navy after the winter. A few give points about uniform, ships, guns, etc. The A group did no better than usual, if as well. The C and D groups were better, but in some cases confused between Vaudreuil and Montcalm, Anson and Saunders. On the whole, the poorer groups remembered better than they would have done without the film."

289. Experiment 89. Experiments 89 to 93 with the Wolfe film were taken with School Certificate classes. One set of boys, like the girls of Experiment 82, found the film pleasant, but did not regard it as a serious contribution to their learning of history, and one individual at least was highly contemptuous. The group was formed of 39 boys from Form IVA. and 12 from Form V. in a London Central School. The average age of one form was 15 years 3 months, and the other 16 years 3 months. They had studied the subject thoroughly, several with a view to the Oxford Senior examination. Six of the Upper boys said they had learned nothing from the film. All the others had acquired a few new facts, chiefly connected with events after the English entry into Quebec. Several had not previously heard of Vaudreuil. They enjoyed the climb and the battle. "I thought the fighting was thrilling, sir." They were critical of the detail of the film. "Didn't the light change rather rapidly from the time of getting into the small boats to climbing the cliffs?" "I didn't know that cannon balls exploded." In both these cases, the critic was proved after discussion to be wrongly disdainful. "The deaths were too long." "The French were made too cowardly." "The Governor-General turned tail too soon, and the French army left the cliff face when an English ship appeared." "Were the English sailors slovenly in their rowing at that time? They weren't in time." "The mast of the English

scout ship must have been rather high to rise above the cliff." "What did the English sailors do besides manning the guns?" "It said the English in Quebec were ill and had no food, but those on the walls in the spring looked plump and healthy." They asked if the English had not sufficient boats to land all the men at the Foulon at once, wondered why none of the Indians were seen in open battle, could not understand why the French left Quebec to its fate with so little resistance after the battle. On the whole, however, the verdict was that the film was "very good." The boys had apparently missed few points in the film, though they were very disinclined to talk. They did not seem to have attached any significance to the introduction of the scene in Pitt's study, but saw that the film made clear the reasons for English success, instancing the co-operation of navy and army, the more disciplined troops of the English, and the coolness between Montcalm and Vaudreuil. All but three of the class thought that Wolfe and Montcalm had become more "alive," but they agreed with the boy who thought Wolfe was shown as too effeminate. Experiment 22 had been taken with younger boys in this school. The teacher wrote: "One point is worth remarking. I asked any boy who would care to, to write an account and criticism of what he had seen. Nearly every boy in the youngest form responded, while from the Fifth Form I got one! It will be noticed that the younger boys are almost unanimous in approval, while the Fifth Form is scathing with all the self-assurance of 16 years." This is the essay, from a boy aged 16 years 3 months:—

"The film in itself was good. The acting was for the most part very good indeed, especially the part where the Heights of Abraham were scaled. The lighting, for the main part, was good, except for the fact that it was not clearly shown that the scaling of the Heights was done at night time. The lighting there was a little too brilliant. *Too much stress was laid on the deaths of Wolfe and Montcalm*, but it was clearly shown how much Pitt had to do with the acquisition of Canada by the British. It showed how Pitt saw that after Britain had beaten France, whichever country's navy reached Canada first in the spring would finally conquer Canada. He saw that if France reached Canada first the whole work of the British during the winter months would be wasted. So he saw to it that Britain snatched Canada first. These facts were shown on the film, when Pitt was talking to the Admiral of the Fleet, when he heard the news that the French had been beaten. As regards the fighting in the film, the part where Wolfe's order that no British soldier was to fire until the French were within forty paces, and that was so heroically carried out, was very well acted. But apart from a few other minor details, the film was very good. With regard to the teaching of history in schools by films, it was shown that it would be a success for boys between the ages of about six and seven. For lads between sixteen and seventeen, however, it would not benefit them very much. For those who saw the film, who were between the ages of sixteen and seventeen, approximately, there was nothing that was not known before, and so it was clear that it would only be a success for younger lads."

Judging from the lesson, the essay is probably quite representative of the views of the Fifth Form. I should say that the general opinion of IVA.

was somewhat more favourable. The teacher compares the excellent response from Form I., aged 12, and that from this class : " In the Upper Forms the response was poor, worse than when I give an oral lesson. In my opinion this is due to the fact that adolescent boys are shy of expressing their opinions in public ; they fear ridicule from the rest more than anything else. In addition, films are much more of a novelty to the younger boys than to the older. There is no doubt but that young boys think in concrete terms, while boys of 15 are beginning to be able to think in the abstract. The result is that youngsters take a film quite literally, and as their sense of time is not developed there is apt to be some confusion. Further, all children are extremely critical of detail, so that every care should be taken to ensure the absolute accuracy of everything that is shown. In conclusion, judging from the experiment and its results, I should say that films could be a valuable adjunct to the teaching of history to children up to, say, 14+, but that above that age they are more of the nature of an interesting illustration than a definite aid to teaching."¹

290. **Experiment 90.** A different type of test was taken with 18 boys, aged 16+, in a West Riding Secondary School. They had studied the period. They saw the film, and, without any discussion, were asked to write what they remembered. Two months later, the usual delayed test was given. Both sets of essays were well balanced and comprehensive. In this delayed test all the essentials were remembered, usually in their proper sequence. There were some omissions, few errors ; only one boy, always very backward, was badly confused. Only two references were made in the delayed tests to the maps, two to the date, in both cases given wrongly. Anson is generally remembered but not Saunders. The general standard of the class was raised, the poorer boys improving, but two A boys deteriorate, one to C and one to B+.

EXPERIMENT 90 : IMMEDIATE TEST—18 BOYS

Same Grade, 2.	Higher Grade, 14.	Lower Grade, 2.
1 in A	1 B to A	1 A to B+
1 in B	5 B to A-	1 A to A-
	2 B to B+	
	1 C to A	
	1 C to A-	
	1 C to B+	
	1 C to B	
	1 D to A-	
	1 D to B+	

¹ Cf. use of this same film as a definite teaching aid with a Matriculation Class, *infra*, 293.

EXPERIMENT 90: DELAYED TEST—18 BOYS

Same Grade, 5.	Higher Grade, 10.	Lower Grade, 3.
1 in B+	1 B to A	1 A to C
3 in B	1 B to A-	1 A to B+
1 in D	1 B to B+	1 B to C
	3 C to A	
	1 C to A-	
	1 C to B+	
	1 C to B	
	1 D to B	

The most striking point about this test, apart from the ease with which the boys grasped all the details of the story and the verve with which they retell it, is that the boys, unasked, give criticisms of the film. Several are amused at mention of the Indian Allies of the French: "A part in the film which seemed very humorous was the mention of the Indian Allies. Expecting to see a few hundred men of warlike nature, we were surprised to see two men run out of a neighbouring thicket." They mock the battle scenes: "The soldiers on either side dropped between intervals which seemed ridiculous. Fancy standing 40 paces away from a body of men and only killing at intervals!" "Montcalm marched to his attack, his soldiers firing at the enemy. It was only here that the 'taking' of the film seemed crude. It was too much like a pageant, but I can appreciate the difficulty of 'shooting' a battle." Their remarks on the actual battle, however, emphasise the value of the film in pointing contrasts between the methods of different eras. Even these elder boys, accustomed to modern war films, had no conception of eighteenth-century warfare, despite their history lessons and history books. They write, for instance: "The English ousted the French from their camp. Many such scenes followed. I began to suspect that it was a film to glorify the dash of our soldiers, though a more wooden set of soldiers I have never seen. . . . The forces were then arrayed in battle order. This caused a great amount of laughter. It looked more like a 'line up' for a review." Another, one of the most intelligent, says: "The film was very nice for a change from ordinary school work, but as it was rather humorous to watch well-dressed soldiers with powdered wigs standing about 20 paces apart in straight lines holding their rifles up stolidly and shooting each other down, no serious thought was given to the real meaning of the film. The film was remarkably well photographed, the scenes were fine and realistic, and the acting very good. The old-time military manœuvres were rather funny, compared with those of the Great War when the armies were fighting 5 miles apart." The briefest oral discussion would have driven home the point that, though the film perhaps shows the battle as too-pleasantly-clean and gentlemanly

an affair, men actually did stand up in the eighteenth century in powdered wigs and shoot at 40 paces. The teacher wrote :—

“(1) The essential difference between warfare now and then is very closely brought out in the film in a way impossible to realise by means of verbal description.

(2) The reproduction of events in their original setting—a very valuable asset.

(3) Map-work—useful—but could have been used to better advantage, to show, *e.g.* :—

(a) The position and importance of Quebec.

(b) A map of the St. Lawrence River—showing the difficulties in the way of capturing Quebec.

(c) A view of the British and French positions on the Heights of Abraham.

These shown with a pointer (as on the last map), with the items concerned clearly marked, would be much more effective than a mere map or plan flashed on the screen for a second or so, without explanation.

(4) The advantage of carrying on the film to the capture of Montreal is shown in emphasising the importance of the Fleet in warfare. (Also—Geographical interest—the freezing of the St. Lawrence mouth in winter.)

(5) As a whole, the film would have gained in unity and coherence if long-distance views could have been shown of the Heights of Abraham and the battle, instead of showing these in sections.

(6) The subject matter was interesting, but dramatic events of this kind can be effectively dealt with by means of the descriptive lesson. More valuable use could be made of the film in dealing with social and constitutional history.”

291. Experiment 91. Girls tested in the same way confined themselves far more closely to the strict matter in hand—giving their memories of the film. Nineteen girls of Form V. Upper A, in a Leeds Secondary School, also saw the film after studying the matter in sufficient detail for the School Certificate examination. It is only children of 12 to 13 who tend to recount merely the climb and the battle. These girls, like the boys of the last test, retell the whole story. All of them, for instance, describe the quarrel of Vaudreuil and Montcalm, often omitted by younger scholars; only two fail to mention the winter siege of the English in Quebec and the bringing of relief in the spring. One girl writes: “I was very excited and could have even cheered when the fleet proved to be English.” Action is remembered rather than detail of causes and results with which the maps deal, but only one gives the causes of the campaign, beyond the mention that the English wished to conquer Canada; the first map is not impressive. And for results, only nine say more than that Quebec became ours. One girl is enthusiastic on the last map. It would seem that the film had impressed the main facts of the attack, and in so doing suggested to the class much accessory detail not usually learned in oral lessons.

Neither in this test nor in the delayed test, written by 23 girls, were the scores particularly different from usual. Five months later the girls remembered the story adequately ; for instance, besides the story of the climb and fight, sixteen refer to Pitt's direction, and fifteen to the events of 1760. Balanced accounts in film sequence are given. The Headmistress thought that such pictorial films might be very useful as a reward for keen work as a whet to appetite, but made the reservation : " I think we must not use films too much. Children would get a facile impression of events of history, and tend to underrate ideas and causes underlying." This criticism does not hold of the film as used as a basis for discussion, as in Experiments 78, 80, 92, 93, 99.¹ The history mistress wrote :—

" Like all films, this must be of particular help to the unimaginative child who finds it difficult to relate history to reality. At the same time, films must help all to supply colour. The Wolfe film seemed to me to tell a clear story of the part played by the individuals, but the massed action was less helpful.

Helpful.—e.g. (a) The relative parts played by Pitt, Anson, and Wolfe were made very clear. The analogy of the sword was helpful. The study of the map—the planning of the attack must have given some conception of the co-operative work that went on.

(b) The pictorial representation, though by no means ideal, must have helped these names to become more than names in a text-book, a lesson, a homework exercise—and the unimaginative child finds it very difficult to make them anything other than this.

(c) Costumes of the period when actually worn by moving people immediately carry the conviction that they were once a part of life—become more convincing than any illustration or printed description.

(d) The film continued to tell a clear and dramatic story of the decision of Wolfe, the difficulties of Montcalm, the heroism until death of *both* leaders—a very valuable lesson.

(e) The critical waiting for the fleet by both French and English served to drive home finally the decisive part played by the fleet.

Less Helpful. The military details, I thought, were less clear. Perhaps with careful preparation for this section of the film and a special warning of points to notice, this would have been better. As it was, the masses were somewhat confusing, and it seemed to me that here the speed of the film was too great." She noted : " One girl, quite hopeless as a history student, but a picture ' fan,' declared that she had enjoyed the Wolfe film as much as a visit to the pictures, and wished she could always do history that way." She finally added : " To see a film properly requires preparation beforehand, as a visit to a theatre. As usual, the short time allowed for the subject is the chief difficulty."

292. Experiment 92. Another test was made with a School Certificate Class, boys and girls aged 16, in a mixed Secondary School in the West Riding. The class had studied the Seven Years' War a few months

¹ Cf. *supra*, 227, 230-1, 233 ; *infra*, 321, 324.

previously. Before seeing the film all had a revision lesson. One half of the class wrote essays on the Conquest of Canada before seeing the film, the other half afterwards. The teacher found the essays of the two groups very similar ; the film group gave little more detail than the others, the outstanding difference being that those who wrote after seeing the film concentrated more on the difficulty of scaling the cliffs and on Vaudreuil's incapability than the others. But the pupils' supplementary essays criticising the film, and the discussion lesson, showed that the class had benefited. The teacher summarised her impression of the lesson thus :—

“(1) The class was mentally alert during the film show ; this was evidenced by their discussion and questioning afterwards.

(2) The Quebec film is a valuable teaching aid. It supplies atmosphere impossible to convey in an ordinary lesson.

(3) The class were unanimous in thinking the film clearer than an ordinary lesson.

(4) The class appreciated the fact that Pitt's hand in organisation was clearly shown.

(5) All pupils were interested in 'old-fashioned' dress, guns, ships, etc.

(6) The children thought that the scene between Vaudreuil and Montcalm showed well how the latter was handicapped.

(7) Many pupils were particularly struck by the fact that the film impressed upon them the difficulty of Wolfe's scaling the Heights ; the scene made clear the boldness and risk of his plan. The manoeuvres from the top of the cliff to the battle are difficult for scholars to understand from reading or hearing, but become quite clear after seeing the film.

(8) Many thought that the film was good if the facts were previously known, but if not, the scene where the armies awaited the ships would not have been clear, as it was not obvious which army was in possession of Quebec.

(9) One pupil thought the causes of the war and results not touched upon, but that the film gave a 'vividly filled space in the ordinary run of History,' but it needed imagination and preparation to put it in its proper place.

(10) The laziest boy in the class proclaimed it an *ideal* lesson.

(11) Many say it is better than an ordinary lesson because there is nothing to distract, and, 'even if you are not interested you can't look out of the window or read ; you have to stare at the film.' ”

A delayed test was taken two months later. The report runs : “The whole class retained a clear idea of the story. The children remembered the essentials, the organisation of the attack on Quebec, the difficulty of taking it, the contributing factors to success. The A group was not better than usual. B, C, and D groups remembered more clearly and in more detail than usual.”

293. Experiment 93. The final experiment with a Senior Form was with the Matriculation Class of a London Secondary School, 34 boys

whose average age was 15 years 9 months. An interesting lesson followed the film, any initial disinclination of boys of this age to discuss in front of strangers being overcome by the method adopted. Each boy had pencil and paper, the answers to the questions asked being written by all the class, and selected ones then read aloud for general comment. These are the questions and answers :—

Question. What characters struck you as like your imagination from previous reading ?

Answer. Most of the class found that Wolfe corresponded to their previous notions. Half gave Montcalm, about a third Pitt, and a quarter Vaudreuil.

Question. Were any quite different from your former view ?

Answer. Seven gave Pitt. The reasons were discussed. Some were surprised at his small stature. Others found him rather unemotional ; they had expected a more excitable person. The teacher explained that excitable folk are only so occasionally. Eight gave Wolfe. One boy thought the death scene made him appear rather "tame." Others had expected him to be more to the fore in the actual battle. The class decided that Wolfe's job was more or less done when he had brought his men to the striking point. Many thought the film unfair to Montcalm in that he appeared far too excitable. The necessity of exaggerating such traits in a short film was pointed out by others in extenuation. Several commented on the presentation of Vaudreuil. They had imagined him as somewhat like the film characterisation of Montcalm, short and explosive ; they were surprised at his lack of sense and initiative and at his procrastination.

Question. What was the clue to that ?

Answer. His jealousy of Montcalm.

Question. What explains his jealousy ?

The class were reminded of Vaudreuil's Canadian birth ; the jealousy was not mere personal rivalry but the usual jealousy of a man of Colonial stock of the official newly sent from France.

Question. Who was Anson ?

Several failed to answer. The majority gave his office correctly, but said they knew it before seeing the film. The class did not consider that the film emphasised Anson's work sufficiently.

Question. Who was Saunders ?

Only two did not reply. Half of the class knew of him from reading. Few thought that they would have learned anything about him from the film. None of them had identified any figure on the film as Saunders. They did not think that the film was at all clear on this point.

Question. What important episodes in the film were entirely new to you ?

Answer. Thirteen said that nothing was new, four said, with evident malice, that "the cliffs were scaled in daylight." This point was discussed.¹ The lanterns were raised at 2 a.m. The boats dropped down the river for two hours. The disembarkation was at 4. Would it be

¹ Cf. *supra*, 289.

light at Quebec soon after four on a morning early in September ? It was decided that after all the film was pretty correct on this point. Six had been unaware that Vaudreuil hampered Montcalm's movements. Several had not realised " that Wolfe was more or less an invalid." Some had not known the name " Foulon." One boy said he had not known " that the cannon only fired two shots in the battle." Several mentioned their surprise at finding that the majority of the British troops did not scale the cliffs.

Question. What famous incidents connected with this event were omitted from the film ?

Two boys referred to the story of Gray's *Elegy*, two to the sentry's challenge. Several thought the film could have shown more clearly that the fleet sailed towards the Foulon from further west. Some boys asked why the previous attempt on the Montmorency was not shown. The teacher summed up by pointing out what little ground was covered by the film.

Question. Why was the Foulon only lightly guarded ?

Practically all the class made the two points of the inaccessibility of the cliffs and the over-confidence of Vaudreuil.

Question. Where was the main French army posted ? Explain in relation to the Foulon.

All the class gave the correct answers—on the Beauport coast and further downstream.

Question. What famous men present in this attack were not mentioned in the film ?

Sir Guy Carleton was suggested, and Captain Cook.

Question. Why should the makers of the film not include Cook ?

The class suggested that Cook was not known at the time nor did he play a considerable part. The teacher brought out the point that, nevertheless, English film producers would most likely have introduced Captain Cook into some incident. But he does not loom largely in American eyes. The film's omission to comment on his presence in this engagement is an illustration of the national bias which unconsciously influences the interpretation of historical events.

Question. Does the film explain the causes of the campaign ?

The class thought that this was done quite adequately by means of Pitt's conversation with Anson and by the first map.

Question. Does the film give a general history of the campaign against Quebec ? The class thought decidedly, " No "—very selected history. Important omissions were briefly discussed.

Question. What are the dates covered by the film ?

Twelve gave 1759-60, seven gave 1759.

Question. What was the month of Wolfe's death ?

All the class gave September.

Question. Who was the French commander before Quebec in 1760 ?

Only one gave De Levis.

Question. Is the importance of the navy sufficiently shown by the dramatic incident at the end of the film ?

The class thought that the state of affairs in Quebec was not sufficiently emphasised. A long sub-title explained this, but there

should have been shots of the interior of Quebec with the people sick and starving to stress the importance of the navy as the ultimately determining factor in success. The teacher suggested that it would have been well if the film had contrived in some way to show that victory must lie with the power that had command of the sea.

Question. Finally, the boys were asked what they had gained from the film both as regards facts and general impression of the episode, that they had not otherwise realised.

There was no time to discuss these answers, but the papers were collected. Mostly, the boys confined themselves to giving pieces of information. These were taken from all parts of the film and sufficiently indicate that the film had corrected many false notions. They mention "that Quebec was not taken immediately on climbing the Heights," the existence of the Forlorn Hope, the routes of the armies, the presence of Scots, the method of fighting, the few pieces of artillery, the small numbers concerned, fighting at forty paces, that Wolfe did not die in the heart of the battle, and so forth. The greatest number of references were made to the antagonism of Montcalm and Vaudreuil, and to the French siege of the English in Quebec in 1760. The first was given fourteen, the second nine times. Several boys had gained a new understanding of the people. One boy learned "the character of most characters," another gained "a clear insight into the characters of the Principals." Some feel that they will better remember the episode, "The greatest thing the film has done has been to impress it in my memory." One has "a clearer idea of the geographical position." Another says: "It seems to show easily the relation of one fact to another, where previously they seemed rather scattered, or, in other words, it gave a clearer idea of the position."

It is evident that in this case, even with Senior boys, the film was not regarded merely as an illustration, but was used by the teacher as a definite teaching instrument, not as a stimulus to an interest in history, which was already existent, but for the training of criticism. He used the film as an attractive and intellectually fruitful method of revision, for recall of a chain of events by bringing the class to criticise the film presentation of their climax.

The teacher reported: "The showing of the film was distinctly beneficial, (1) as enabling boys to visualise matters not clearly brought out in written accounts, (2) as encouraging them to criticise details of the representation. In a subsequent lesson there was a useful oral discussion, and written opinions were collected at the end. My view is that Senior Forms should see about three well-chosen films per term, and that these should deal with subjects already studied in books. The awakening of the critical faculty seems the most useful result to be looked for."

294. Summary of Results with Wolfe Film. These sixteen experiments with the Wolfe film convinced the teachers concerned of the value of the pictorial film even for Senior Classes, except in the two cases of

Experiments 89 and 82 ; in the last case the teacher found films useful in the Middle school, and felt that Senior Forms would be helped by occasional showings of social background films. Some teachers regard the film merely as a form of illustration,¹ some as a definite adjunct to teaching,² others think that its function varies with the age of the child.³ Some state their opinion of the value of the film with reservations.⁴ These will be examined later.⁵

295. Experiment 94. Experiments 94 to 99 were concerned with the Naval Warfare film. In all but one case it was used for revision or recapitulatory purposes with classes that had studied the subject for the School Certificate examination, so that it was now fairly tried for the object for which it was produced. The first case concerned a Form IV.A. in a Girls' Secondary School. The film was shown without comment except for explanations of the maps. More was considered unnecessary in view of the girls' knowledge of the period, but the event proved that the film needed far more oral aid to make it clearly comprehensible even in these circumstances. For testing, the class was divided into two groups. Group B of 17 girls was asked : "What points did you notice in the film? Give these in the order you think of them." The opening scenes of the film made an impression, the contrast of Nelson's battleships with those of to-day. Fifteen mention this, and mostly at the beginning of the essay. Thereafter, the answers become a disconnected series of jottings, which convey only too plainly the fact that the film has made no impression beyond the teaching of a few facts. The form of the question encourages disjointedness perhaps, but it is noticeable that in answers to questions of the same kind on the Wolfe and the League films, the children reproduce a connected story practically in the order of the film. As with the younger groups, the pictorial parts are best remembered ; sixteen mention the press gang, twelve the mutiny, eleven the hard life aboard. The tactics of the Nile and Trafalgar are well remembered, but not of the other battles. St. Vincent is only referred to once, and though Copenhagen is mentioned in eleven essays, it is the blind-eye episode which is recalled, not the battle tactics. Nor are the maps discussed with any fullness. The answers are far below the standard expected from girls of this age. Set A, also of 17 girls, were given a question calling for criticism of the film, "Did the film make the subject of Naval Warfare any clearer or more interesting to you than before?" Four girls replied that the film made matters clearer ; the pictorial parts were helpful in conveying ideas of the conditions of the time. Three show a tempered approbation. "The film did not make the subject clearer, but a little more interesting." "Some parts of the film were interesting, but much of it was very dull." Ten frankly expressed preference for their usual lessons. They give the usual reasons. Blackboard maps were clearer than the film maps with their obscure shading ; the film diagrams

¹ *Supra*, 281.² *Supra*, 283-88, 290-93.³ *Supra*, 289.⁴ *Supra*, 279, 291.⁵ *Infra*, 321, 400.

were confusing; the modelships of the two fleets could not be distinguished; the pictorial parts were brief. A typical essay follows.

"The film did not in any way alter my impression of the progress made by Naval Warfare 1793-1805. I had really thought it much more exciting and adventurous than the film depicted it. The ships and the sea seemed to be much too wooden and unreal. A diagram on the blackboard in the lesson made it much clearer than the film, and descriptions of the sailors' life were much more real and exciting than they appeared to be on the film.

The way in which one fleet attacked another was very disappointing and wooden. There were no waves and no firing; in fact the attacked fleet seemed to take things much too placidly.

Parts of the film were certainly confusing. Most particularly when Naval movements were shown by dotted and straight lines. These conveyed nothing whatever to my mind, but only puzzled me. The film as a whole seemed too uneventful, and destroyed my idea of interest and excitement in the Naval Warfare of that period.

Napoleon and Nelson did not appear as many times as they should have done, and when Nelson fell, he did it very unrealistically.

There were one or two interesting parts, *e.g.* the beginning of the film when modern and Nelson's ships were shown in contrast, also the Press-Gang, and the mid-shipmen on the look-out.

The mutiny was decidedly disappointing and unexciting, and was not a bit like I had pictured it. Taking the film generally it destroyed rather than gave interest to the period of Naval Warfare."

The teacher reported :—

"(1) CRITICISM OF EXPERIMENT WITH FORM IVA. The film, though confusing, contained interesting scenes which were appreciated by these girls, who have made a study of this period in preparation for the Matriculation examination, 1930. I feel it will help to sustain their interest in the deeds of the navy, and that they will always remember the press gang and cold midshipman.

(2) CRITICISMS AS A TEACHING AID. Such a film could only supplement a lesson, and even then there is a possibility of its confusing what has previously been understood. In a few cases the film roused considerably less interest than the previous lesson, and so would do harm. There were too many maps for even intelligent children to understand with so little and so rapid explanation. Form IVA. are intelligent girls, and they felt they could not have understood the film at all without previous lessons on the subject. As a form of illustration and revision there was divided opinion. To some the pictorial incidents were valuable—to others they destroyed imaginative pictures already formed, and were dull. This film as a teaching aid could have been more valuable if it had been possible to give fuller explanations during the showing of it. Napoleon's efforts to draw the British fleets to the West Indies to clear the Channel were not understood clearly. As an illustration of naval strategy the film failed, as it was difficult to distinguish the fleets, and the children failed to appreciate the breaking of the line. A colour scheme is more effective in a blackboard diagram when flagships can also be clearly indicated. As

an illustration of the hard life aboard leading to the mutinies, there was hardly sufficient detail—but the children enjoyed the scenes. The film as a teaching aid was spoiled in my opinion by the abrupt termination in the Battle of Trafalgar. Surely it is more important to stress the consequences of this victory and the mistakes into which Napoleon was goaded by his failure to control the sea.”

Twenty-four girls did delayed tests taken five months later. No one gives anything approaching a clear and connected chronological account of the film. Twenty remember the first view of the sea, twenty-one the press gang, eighteen the death of Nelson; nine contrast the ships with those of to-day, six mention the mutiny. Of tactics, six give those of the Nile, five of Trafalgar; no others are mentioned. Five mention the English blockade, five the chase to the West Indies. No other matters occur more than three or four times. Most of the girls say there were too many maps, too many routes indicated, too many manœuvres with toy ships to remember any of them clearly. The teacher writes: “The result of the test seems to me to indicate that the film did not leave any clear impression on their minds of the Naval Warfare in the time of Nelson. In many cases the best girls in the form, which is an A form, have written the worst answers.” It would be useless to write out the full tale of low marks. Three girls only retained their usual grade; the other twenty-one did far worse than usual.

296. **Experiment 95.** Far more oral description was given with subsequent showings of this film, however senior the class, so that failure was not so complete. Twenty-two scholars, the School Certificate Class of a Mixed Secondary School in the West Riding, saw the film. They had studied the subject in a lower form. On May 16th they had an ordinary revision lesson on the naval aspects of the English struggle with Napoleon, and wrote an essay on “The Work of the Navy in the French Revolutionary and Napoleonic Wars.” The class saw the film on May 28th, and wrote an essay on the same subject as before on May 29th. The essays were marked for general grip of the subject. The teacher reported:

“Out of 22, 12 increased their marks—
 1 by 4
 5 by 3
 2 by 2
 4 by 1
 5 remained the same
 5 decreased—
 4 by 2
 1 by 1.

Among those whose marks decreased one (who lost 1 mark) was one of the most intelligent pupils in the class, and the other four were average. The one boy said the film muddled him.

The film did not appear to increase the historical knowledge of the class of the type useful for examination purposes, but it undoubtedly gave

them background. This was obvious in conversation, though not in their written work."

It emerged from the discussion and from the short papers in which the class gave their opinion of the value of the film, that they felt that the maps had impressed something of the immensity of operations. "It will take me a long time to forget the coastline of Europe as it was shown." The pictorial method had brought out some points not easily realisable from oral description. "At the Battle of Copenhagen it showed the town in the background, which demonstrates the audacity of the English attack." But many of the class felt that the film contained too much. This, and its disconnected nature, made it less helpful, they thought, than an oral lesson. Of the delayed test, six weeks later, the teacher wrote :—

"Very badly done, probably partly because it was the last day of term. At the same time, even good people give no details. They criticise the film as being a collection of maps with no clear 'story.' They have retained an idea of the press gang and of the mutiny, owing to ill-treatment ; some of the D group say they remember clearly the great amount of coastline we had to watch through seeing maps, and they learned how guns were worked and understood the Battle of the Nile because of the film. Some frankly say they got nothing new from the film. Their written work in this delayed test is not nearly as good as a delayed test on an ordinary lesson. They evidently found great difficulty in recalling anything continuous in the film."

297. **Experiment 96.** Form IVA., aged 15, of a Girls' Secondary School in Leeds saw the film with similar results. The class felt that the film had helped them. "By seeing the film it gave me a very much more clear idea of how things were carried out in Nelson's time. Actually seeing the picture, maps, etc., I had a much more strong and clear impression than if I had read it from a book or listened to some one else. I could remember this more easily to write an essay on, because I had such a strong base to refer to. The film also cleared my mind of many muddling ideas I had." But the delayed tests, written four months later, again proved that children do not remember animated maps and diagrams if any number are shown at once, however telling they may initially appear. The teacher's report is given in full :—

"PROCEDURE. The matter comprised in this film, generally speaking, had been taught five months previously. No revision lesson of a formal type was given. All the class were asked to revise the subject for homework, then 15 minutes was allowed for a discussion of suitable headings for an essay. The next homework period was given up to the writing.

After seeing the film the form were asked to write about it ; they were told to show what additional knowledge they had gained, which points had been clearest, and which, if any, were confused.

Most points on the film were commented upon favourably. Thirteen girls thought the view of the ships moving into battle position was specially good, seven mention life on board ship, plans of campaign, type

of ship, or dress of soldier; six comment favourably on the maps of Europe. Blockades, press gangs, rejoicings on shore, mutiny, recoiling of guns after firing, clouds of smoke from gunpowder, dates, marking of towns on map, difference in muskets from modern ones, were all noticed.

Of unfavourable criticisms the only general one concerns the maps of Europe. The general opinion is that the shading was too similar and therefore confusing, and that the dotted lines to mark the blockade would not have been noticed had not Miss Consitt called attention to them. One girl thought it impossible to learn dates in the time allowed, one was not satisfied because the ships did not appear to fire; for one the death of Nelson was not at all realistic, another wished to see more of the build and the working of ships.

One girl only, whilst claiming that the film was clear, proves by remarks that she was confused by it; the toy ships moving to position for battle she took to be blockading the coasts, and the press gang as an incident to prove the cruelty of the French.

CRITICISM FROM THE TEACHER'S POINT OF VIEW. (1) The film was too comprehensive to be easily grasped except as an aid to revision—for this it was well suited. As a teaching film in the first instance it would be far too crowded with facts. (2) Maps—I agree with the children that the shading was too near in tone for the flash maps of the alliances to be clear. They could, I think, be improved by ignoring the countries which were, for the time being, neutral, and thus having two grades only. (3) The film showed greater realism than the one on Roman Britain. There was not nearly as much feeling of a cinema star seeking the approbation of the onlooker, nor of pageant of the Wembley type. Once only did it become very evident that this was acting, *i.e.* Nelson obviously was not shot unawares but sat down when and as he chose.

THE DELAYED TEST. The essays are not good on the whole. One girl confused the beginning of the League of Nations film with this one. Few remembered the maps and plans of battles, and surprisingly few anything about the press gang. Most remembered the Battles of the Nile and of Trafalgar. The beginning of the film had impressed about three girls."

The grading was as follows :—

EXPERIMENT 96: DELAYED TEST—16 GIRLS

Same Grade, 3.	Higher Grade, 4.	Lower Grade, 9.
1 in B+	1 C+ to B--	1 A- to B
2 in C+	1 C to B--	1 B+ to C+
	2 C to B-	1 B to B-
		1 B to C++
		1 B to C+
		1 B- to C
		2 C+ to C
		1 C to C--

298. **Experiment 97.** Fifteen girls aged 15, of a School Certificate Form of a Bradford Girls' Secondary School, saw the Naval film some time after a series of lessons. They were then given, without discussion, a homework question. "What do you think of this film as a help in revision? Answer with reference to the maps, the mechanical ships, the scenes of naval life, the representation of Nelson, and any other points." All but four think the film was of use. One or two are enthusiastic. The majority feel that the devices used in the film could have been employed more effectively. With regard to the maps, all liked the showing of routes by an extending dotted line. It was helpful for only essential points to appear on the maps, these being thus emphasised. The contrast afforded by differently shaded portions of the map could be helpful; here the colouring was not clear and the maps were too numerous. Arrows, pointing to a town, as at Boulogne, are useful, stressing the name and position; they are poor when suddenly appearing to indicate the position of a naval battle. The girls wished the routes of the fleets to the place of battle to be shown. The toy ships made English tactics clearer, but to avoid confusion the sails of the rival fleets should be differently coloured. The pictorial parts were interesting, but too short to give any clear idea of naval conditions. Nelson does not suffer from the film representation. The actual events shown emphasise his resource, as at St. Vincent and before Trafalgar. He is shown as an excellent admiral, as at the mutiny, and personally brave. But they have to judge from the course of events rather than from seeing Nelson. They would like him to play a more prominent part in the film.

The girls felt that too much was attempted so that they were left confused. The film lacked coherence, "They seemed to just slip off from one thing to another without an ending or any link." "It would have been better if there had been more about each battle or if they had tried to make one film showing one battle, as in the film about Wolfe."

299. **Experiment 98.** In the last two cases where the Naval film was shown, it proved definitely useful. Strangely enough, one of these classes was young, the average age 14, and the actual subject matter had not been studied. It seems that satisfaction with the results achieved was due to the fact that the children were not expected to remember the exact details of the film. The class had learned about the Austrian Succession and the Seven Years' War, and saw the film to get "atmosphere" for naval warfare of the eighteenth and early nineteenth century. After the film, the children wrote down all they had learned from it of naval conditions, and their answers formed the basis for a class discussion. The teacher made this summary of the points which had chiefly interested the class, a mixed class of boys and girls:—

"(1) The slowness of the movement of the ships. Warships were sailing vessels of wood as compared with the 'ironclad' of to-day.

(2) The slowness in firing the cannon, partly because they were muzzle-loaded, and because they had to be dragged back from the gun-

hole to be loaded. The guns were not of much use for long range. The guns were on wheels, and fired by touching the hole with a burning rope. The shot was not explosive, just big balls. The shooting was not regular. Timing depended on the quickness of the gunners' loading.

(3) The English ships sailed in a straight line one behind the other. Sometimes they lost ground in tacking, *e.g.* in the Battle of Cape St. Vincent, if Nelson had not broken from the line, the enemy would have got away. The closeness of the ships in battle, hand-to-hand fighting, ships deck to deck, boarding; to-day the ships are miles apart. The English ships were always on the watch and after the French ships as soon as these left harbour. The English did the attacking; they chased the enemy when these would not give battle. English daring was shown at Aboukir Bay (shallows) and at Copenhagen (going so near the town). The ships had high decks and did not look comfortable. The look-outs had perilous positions, quite unprotected.

(4) To get recruits, the press gang had to be used. The work on board ship was dull, hence the mutinies. The officers were bullies. The rigging was so low and the bulwarks so high that the men were boxed in.

(5) The uniform of the officers. Snipers had an easy target in Nelson, who wore all his medals."

Her general conclusions are: "The film was somewhat spoiled by the fact that light entered the room from a defective blind. Apart from this, the clearness of the film appeared to fluctuate. All the children found it difficult to follow and thought there were too many maps, too few pictures, and too little 'story,' but, judging from their written work and from their conversation, the film was worth while as it did give them side-lights on conditions in the navy which they would not otherwise have acquired. The film could be much improved. It was disjointed, and the captions were disconnected." A delayed test was given five months later. Of this the teacher said: "The A group noticed Nelson's tacking at the Battle of Cape St. Vincent, which was not commented upon by the others. One mentioned the welcome of the sailors on their home-coming, and the press gang scene.

Most children in all groups got the idea of the importance of blockade. They mentioned the manœuvres at Aboukir Bay and the routes to the West Indies, etc., before Trafalgar. Most mentioned dress, guns, boarding, the mutiny.

The poorer children, C or D groups, remembered more than they would have done without seeing the film."

This teacher had assisted in Experiments 88, 92, 95, and 98. Her final judgment was that the film deserved a regular place in the history course. The time taken for the film-showings was the chief difficulty, but, in view of the film's advantages in giving colour and stimulating discussion, and the help to the poorer groups, time could well be found to show each form at least one film a term.

300. **Experiment 99.** The film proved highly successful as pro-

viding a basis for discussion for two Matriculation Forms in a Boys' Secondary School in the West Riding. The film was shown with a maximum of comment. The film was stopped not only at the maps but at every battle and the manœuvres indicated. A very lively discussion followed :—

Question. In what scenes did Nelson appear ?

All these were given quickly.

Question. What idea of Nelson did the film leave with you ?

The boys did not appear to think the film representation poor.

They pointed out that the film showed :—

- (a) His disregard for danger—medals worn at Trafalgar.
- (b) His power of quick thought and action—St. Vincent.
- (c) His disregard of orders—St. Vincent and Copenhagen.

The boys asked what was his position at St. Vincent, and what really occurred at Copenhagen. Had he the right to continue action ? Discussion was very animated here.

Question. What information did you get from the film of naval life ?

All the different scenes of life aboard were quickly recalled. The boys thought these were chiefly useful in emphasising :—

- (a) The hard work—the gun scenes.
- (b) Severe discipline—use of the whip.
- (c) The relation of the grades, *e.g.* standing to attention for inspection.
- (d) Dullness.

Question. Why was there so much dullness ?

Answer. Because of the blockade.

Question. What is a blockade ?

Answer. The ships are placed round enemy shores.

Question. Why ?

- Answers.* 1. To prevent food going in.
2. To prevent enemy ships from leaving harbour.

Question. How was the blockade shown on the screen ?

Answer. By dotted lines round the coast.

Question. Is that a good method of indicating a blockade ?

Answer. No. There were very big gaps left actually, and the dotted line was continuous.

Question. How was the blockade carried out ?

Answer. The enemy ports were watched.

Question. How ?

Answer. English warships stood out to sea.

Question. How did they keep watch on enemy movements ?

Answer. By frigates.

Question. Do you remember the sub-title giving the cause of the mutiny as the dull hardship of watching enemy ports ? Do you consider it a correct statement ?

Answers. 1. No, bad conditions were chiefly responsible.

- 2. Yes, but the dullness of blockade made them think more of their grievances. They forgot them in action, or did not bother about them.

Question. How did enemy fleets escape from a blockade ?

Answers. 1. In fogs and storm.

2. When the English refitted.

Another boy asked how many warships watched a base, thinking that the squadron could refit in sections. It was explained that it was unwise to split up the fleet too much, and in any case, storms rather than refitting usually occasioned failure to preserve a blockade.

Question. What battles resulted when the French slipped the blockade ?

Answer. St. Vincent, the Nile, and Trafalgar.

Question. What do you think of the method used by the film to portray tactics ?

All the boys thought it good. One boy asked what was the distance between ships, for it seemed easy for Nelson at St. Vincent to sail between ships of his own line. Another asked why all the lines across the Atlantic were left on during the Trafalgar campaign. He thought it confusing. This roused a chorus of agreement. The same boy suggested that this operation would have been clearer if short, black, moving blocks had represented the two fleets. The boys thought the film made the sending forward of the frigate very clear. The end of the voyages was most confusing. After Calder's fleet left England "there were too many criss-cross lines." One boy wished the map could give some indication of the time of the Trafalgar manœuvres, and asked how long it took Villeneuve and Nelson to cross the Atlantic. Another boy asked why we did not conquer northern Africa and so hold both sides of the Straits of Gibraltar.

Question. What did you think of the maps ?

All the class thought the maps, being simplified, far easier to follow than those in an atlas. One boy said that in following alliances in an atlas you had to trace one country through perhaps twenty maps. In the film the changing colours showed the reshifting of alliances. A second said the idea was good, but not well carried out in the film. The colours were not clear. There was a chorus of agreement that it was a good idea badly executed.

Question. What about the sub-titles ? Is this adequate—"We persuaded the Baltic countries to form the Armed Neutrality to prevent British trade in the Baltic" ?

Answers. 1. It was chiefly our naval stores that were concerned.

2. The caption leaves out of account the question of contraband of war. This point was discussed.

Question. Is the last sub-title good ?—"The results of naval warfare. British merchantmen were free to sail the seas."

Answer. They always had been free to sail the seas.

Question. What was Napoleon's next plan against England ?

Answer. The Berlin and Milan decrees.

Question. Was the Continental system a success ?

Answer. No.

Question. Can you connect its failure with naval warfare ?

Answer. Yes ; our navy was pre-eminent.

Question. Have you any further criticisms on the film ?

Answer. The scenes of naval life were far too short.

Question. Do you think they were poor ?

Answers. 1. No, but there wasn't enough of them.

2. I've learned more facts about the navy from other films.

Question. What other films ?

Answer. " Captain Blood." Most of the boys had seen this film.

Question. What facts did you learn from " Captain Blood " ?

Answers. 1. About sleeping quarters.

2. About living conditions.

3. About the bad food.

Question. Have you seen any other films on this subject ?

Answer. " Sea-Beast."

Question. Any more remarks ?

Answers. 1. It is not so clear as a picture-house film—the photography. (This is true. My copy fluctuated in clearness and was frequently criticised on this point.)

2. It still leaves naval warfare surrounded with a glamour. This remark came from a boy doing Higher Certificate work. I pointed out that the film emphasised the frequent dullness of a sailor's life, the hard work, the harsh discipline. " Yes," said the boy, " but there's not enough of that, and not enough of the real horror and suffering. I think all war films should be horrible."

Question. Do you think films would help you to learn history ?

Answers. All but one thought they would be useful.

1. One boy said that picture-house films were so exciting that you naturally watched. You got used to fixing your attention on the screen. So you concentrated on the film, even when it was a film like this that wasn't exciting !

2. Many boys said the maps were helpful.

3. Only one boy thought it more interesting than an oral lesson.

4. The majority considered that it was useful to fix facts already studied.

5. The Higher Certificate boy said that films would not get you through examinations. You needed the text-book for the hard facts, but the film impressed points. His remark met with general agreement.

6. The only dissident (whom the teacher considered very intelligent) objected that the film gave no time to stop and think things out. Reading allowed for turning back and getting clear the relation between new facts and those met earlier. The class was impatient with him, feeling that they could have both book and film.

This class was obviously intelligent and trained to think and discuss. It was interesting to find, first, that with such boys the film could be put to good use as providing material for discussion and criticism, and in the second place, that these boys, though by no means effusive, voted for the film as a help after a very dispassionate survey. It also emerged that they dissociated the school film from the picture-house film, and were pre-

pared to accept in school a different type. They considered the pictorial parts less effective than such scenes in the ordinary cinema, but were much interested in the possibilities and telling effect of animated diagrams and maps. The boys' natural interest in the mechanism of such devices and in general film technique provides a fresh angle for discussion of the subject matter of the film.

Three months later the boys remembered the film well. Like the boys of Experiment 89, they gave criticisms of the film and the value of the method, though only asked what they remembered of the film. No new points were made. Two quotations will serve to illustrate the general view on film and method. "The thing which struck me most in the film was the difference between Naval Warfare in Nelson's time and Naval Warfare to-day. Very few things in those days were like the corresponding things to-day." "While you are reading a text-book you can always refer back and it gives it an advantage, but when you see the film it impresses the various events on your mind better than any text-book could do. Thus a combination of the film and text-book would make a much more instructive and enjoyable history lesson."

After the lesson, the teacher had commented on the value of film-showings as training a critical attitude to films in general. In the first report he says: "For older boys I think that the diagrammatic film has a great value. In the Nelson film, the battle tactics and the extent of alliances and blockades were made very clear." On the delayed test he says: "The essays were written in class without previous warning, so that there was no revision or use of the book. On the whole, I think the results are very good. A and A— are only given for what I consider distinctly good work; C is definitely poor, so that, as might be expected, most fall into the B class. It is clear that the average boys have done better than, or quite as well as usual. The accuracy of bright and average boys is noteworthy, for the subject matter of the film lent itself readily to confusion. Where confusion has occurred, it is in every instance, I believe, with a dull boy, the sort of boy who produces a muddled account of a perfectly clear text-book narrative. Another definite result is that while about half of the bright boys have done quite as well as usual, all four who have done worse than usual are in the bright class for their usual history work. In general, the essentials of the film have been remembered. Different boys remembered different things. A good deal had been said in class on strategy, and the strategic points were well remembered. The film itself, however, clearly made a strong impression, because the battle tactics are frequently described, and these had not been discussed in class. Thus the film has, I think, undoubtedly had a good effect, and seems to be more suitable for class use than I thought at first. The results must have been better had I seen it before and kept it in mind in previous class work."

The grading was as follows :—

EXPERIMENT 99: DELAYED TEST: MATRICULATION FORM—
17 BOYS

Same Grade, 6.	Higher Grade, 9.	Lower Grade, 2.
2 in A 1 in A— 2 in B 1 in B—	5 B+ to A— 2 B— to B 1 C to B— 1 C to A—	1 A to B+ 1 A— to B

UPPER VA.—17 BOYS

Same Grade, 9.	Higher Grade, 6.	Lower Grade, 2.
1 in A 3 in A— 3 in B+ 1 in B— 1 in C	1 B to B+ 1 B— to A— 1 B— to B 1 C+ to B+ 2 C— to B—	1 A to B 1 A to B

301. **Summary of Results with Naval Film.** The Naval film was used in six cases. In the first test, the teacher thought the experiment an entire failure. In four cases the schools considered that the film had been of assistance, but that the film was not of the kind they desired to use. In the sixth instance, a Matriculation Class decidedly benefited from use of the film.

302. **Experiment 100.** In Experiments 100 to 107 "The World War and After" was used, in four cases with children without previous knowledge of its subject matter. Experiment 100 brings out two important points: in the first place, the value of the film for the teaching of essential historical concepts; and secondly, the dependence of method on the end in view. If it is desired to create a general impression, the film can well be shown to introduce a topic. If detailed knowledge is required, so long a picture as the League film must follow preparatory lessons. In Experiment 100 the master regretted that he had taken the League film before lessons on the subject. The League was shown to 45 boys aged 15 in a London Central School. It was shown straight through without comment, and with a follow-up lesson on the same day. The somewhat amusing opening to the lesson again shows that familiarity with the melodramatic film of the picture palace does not incline boys to disparage the much less spectacular school film. Thus :—

Teacher. How many were bored by the film ?

Answer. None.

Teacher. How many thought the film exciting ?

Answer. None.

Teacher. How many thought it an odd subject for a film ?

Answer. None.

Teacher. Well, how would you describe the film ?

Answer. "It was a useful sort of film"—and with this the class concurred.

The teacher thus summarises his views of the experiment and film :—

"The film introduced the boys to history as dealing directly with the actions of men. Many facts were taught through picture, diagram, and map, many useful ideas of conduct through simple facts illustrated from everyday life. There was definite thought and aim behind the compilation of this film, so that the response was excellent and the subsequent discussion was both fruitful and lively. The diagrams were understood, the maps were strikingly successful, the picture of the street fight and the garden appreciated, and the points grasped. The war pictures were good, but why not give more of them ?

The League itself was least understood. This portion could with advantage be treated more fully and with fitting ceremonial. Many hazy ideas were corrected—"I thought the League was a few old gentlemen sitting round a table. Now I know that it includes quite a lot of people and that it gets things done." But the continual activities of the League were not quite understood. The Secretariat, the Labour Council, and the International work for peace during the time of peace could have been more fully shown." He points out that the film needs to be taken in conjunction with lessons, preferring the film to come after the lessons, and adds : "Films should be mainly pictorial, as dealing with the actions of men, the object being to stimulate thought and develop understanding, so that terms liberty, freedom, tyranny, democracy, kingship, empire, government, industrial revolution, the Middle Ages, toleration, etc., may not be abstract phrases meaning nothing at all. The cinema interprets the spirit of these truths." He concludes by saying, "I should like to have the privilege of periodical visits such as this one," and outlines a scheme to make film-showings practicable.

303. Experiment 101. Forms V. and VI. of a Bradford Girls' Secondary School saw the film. Discussion followed with Form V. The class had found the film interesting. They liked best the pictorial parts, particularly scenes in the Aaland Isles and Bulgaria, but were at pains to make it clear that they found the maps effective. Generally the parts considered most impressive were the scenes showing the result of the war. "I was too little to know anything really of the war and what it means." They were startled at the reminder that men were still suffering physically from the war. They had not realised the wide extent of the war till they saw the growing darkness on the screen. One girl thought too many scenes of desolation were shown, "Most people know about it." The rest disagreed. The class thought the parts showing the meetings of the League, Assembly, Council, etc., dull and confusing. "The Sessions looked

so much alike, just groups of people. I can't remember one lot distinct from the others." The girls were impressed at the speed of the League's working in the Graeco-Bulgarian dispute.

Form VI., 8 girls aged $17\frac{1}{2}$, gave their opinions on paper. All found the film helpful. One writes: "The details are dry and boring to read. The film gave a touch of romance to the League work." In contradistinction to the girls a year younger, they found the maps the most interesting part of the film. The film, as usual, impresses its lesson, "The film leaves me puzzled that civilised men should fight." This film sets children thinking seriously on vital matters. There is a suggestion that the interest aroused is not merely fleeting. "Schoolgirls have not much time to study the paper, but I at least will try to keep my eye on the League in future."

The teacher wrote: "As an introduction to a difficult subject I think a film more stimulating than a lesson of corresponding length. I am comparing a talk given a few years ago to the Upper Girls on the League of Nations and its work. I am quite sure that far more real interest was aroused and a clearer grasp of the work of the League was gained from the film than from the talk, which was by no means dull. Both formed an introduction to the subject." It is interesting to note the criticism of an Upper VI. girl, an intelligent girl who already held the Higher School Certificate, who said that the League of Nations film taught her more in an hour of the actual work of the League than she had grasped from all her reading about the League activities. This comment of a Senior pupil, an energetic student, on the ease with which a knowledge of the League's working was obtained, is noteworthy. Work in the Upper Forms of Secondary Schools makes heavy demands on scholars; the strain is often too great for adolescent girls. If information can be acquired with ease, intellectual freshness is preserved for critical work on the material thus learned with facility.

304. Experiment 102. The League film was shown to three Fourth Forms in another Girls' Secondary School in Bradford. There were 29 girls in IVA., 23 in IVB., 14 in IVc., the average age of all being 14. The girls had had no definite teaching on the League but had collected information relative to it from such sources as newspapers for four weeks previous to the film-showing. Discussion lessons followed with each class separately. IVA. and IVc. were taken in the same way, to judge of the contrasting effect of the film on bright and very backward children. In view of the low mental ability of IVc. a very straightforward series of questions were asked on the film's subject matter, relating to the causes and results of the War, the organisation and method of working of the League. A general discussion on which part of the film they preferred was first taken, to set the dull girls talking naturally before the more serious questioning began. IVc. much preferred the pictorial parts of the film. They thought the maps were far too numerous and passed far too quickly. They preferred ordinary maps to the film maps, for they could spend longer looking

out and learning the points in their atlases. They would like the film maps if they could be stopped, because they were bare of all but the matters under consideration. The class was very slow at answering questions on the subject matter of the film, which appeared to have been too difficult, too long, and too quick for them.

IVA. had grasped the film exceedingly well. Their preferences were the reverse of those of IVC.; they liked the diagrams and maps better than the rest, and considered the illustrations of John Bull and the garden dispute too long. They thought it difficult to grasp the administration of the League, because "all the assemblies looked so much alike." The only one of the class who could remember more than the Council and Assembly had read a book about the League and "had got an idea" of the different bodies. She could not have given their names before seeing the film, but the film had given point to and fixed her earlier ideas.

IVB. was treated differently. They were asked to provide arguments against the League from their general knowledge and to discover effective retorts from the film material. The girls had evidently learned the necessary information from the film and reasoned quickly and well.

The teacher's opinion of the lessons in all classes was that the quick children were even quicker than usual, but that the dull remained slow. It is the shorter, more pictorial film that helps the extremely backward child. But the teacher thought that even the dull children were exceptionally interested and anxious to take part when they could. She considered that their very real interest was due to the fact that they saw in the film ordinary men and women, so that the subject became "more human, less remote from everyday life than a text-book picture of diplomacy."

It was decided to give all forms an essay on the lines of IVB.'s lesson, a dialogue between a supporter and an opponent of the League.

(a) IVA. The work was good. The general result was average, since 14 had their usual grade, 5 deteriorated, and 8 improved, but again, some of the brightest wrote poor essays, and the standard of the worst girls in the class was raised.

EXPERIMENT 102: IMMEDIATE TEST: IVA.—27 GIRLS

Same Grade, 14.	Higher Grade, 8.	Lower Grade, 5.
2 in A	2 B to A	2 A to B
11 in B	2 C to B	3 B to C
1 in C	1 C to A	
	1 D to B	
	2 D to C	

(b) IVB.—13 girls. These girls did far worse on paper than in oral discussion. The teacher thought that orally the girls helped to suggest to one another lines of thought. Writing alone, they left whole sections of the film unexplored, a usual fault.

Same Grade, 5.	Higher Grade, 3.	Lower Grade, 5.
1 in B 2 in C 2 in D	2 C to B 1 D to B	1 A to C 2 B to C 2 B to D

(c) IVc.—14 girls. The subject proved altogether beyond their capacity.

Same Grade, 7.	Higher Grade, 1.	Lower Grade, 6.
4 in B 3 in C	1 D to B	1 A to B 4 B to C 1 C to D

The teacher considered that the complete revolution in method left these girls confused, so that they failed to remember details, but later lessons with the class suggested that increased use of the film would give a very different result. "The use of the film stimulated imagination, made facts more vivid. For more accurate assimilation of facts, the film would need to be used more slowly and with frequent breaks for interpretation. In one quick showing they got an overdose of material due to lack of time."

IVb. and IVa. were tested three months later. The results were average for IVb., better than usual in IVa. Again, two bright girls failed to maintain their usual level, and many of the weaker improved.

EXPERIMENT 102: DELAYED TEST: IVa.—22 GIRLS

Same Grade, 11.	Higher Grade, 8.	Lower Grade, 3.
1 in A 5 in B 4 in C 1 in D	3 B to A 1 C to A 2 C to B 2 D to C	1 A to B 1 A to C 1 B to C

IVb.—13 GIRLS

Same Grade, 8.	Higher Grade, 2.	Lower Grade, 3.
1 in A 3 in B 3 in C 1 in D	2 C to B	1 A to B 2 B to C

The teacher thought that the slower girls would have done better had they had lines of attack indicated. Without help they failed to focus on central points. They remembered the general lesson of the film, but gave little detail, were "inclined to moralise rather than to recapitulate." She also notes: "The analogies presented difficulties to many and produced inaccurate statements, *e.g.* 'a street fight may cause a war.' I think a slowing down and an interpretation of the analogy at the time would have cleared up the analogies. They are used to them in ordinary lessons and usually grasp them quickly."

The teacher did not feel that these written results represented the children's gain from the film. The duller children had acquired "a new conception of historical reasoning. Since the experiment, the children have been keener to apply the film method to the text-book facts, and have been willing to imagine a film. I believe that the whole experiment has been worth while, and that the method is capable of tremendous expansion."

The suggestions for the first scenario in Appendix C are the result of the stimulating effect of this one film on the imagination of these classes. The teacher was talking of the Armada shortly afterwards. "Wouldn't that make a lovely film?" said the girls. They were set in groups to produce one. I learned of this when the teacher rose in a meeting of the local branch of the Historical Association, where the question of films in school was under discussion, to refute the statement advanced that the use of the film stunted the child's imagination. With her girls, at least, the reverse had been the case.

305. Experiment 103. The film was shown to a newly formed School branch of the League of Nations Union. A small Form VI. of three girls, two aged 17, one 16, were asked to write essays on "Describe the machinery of the League," to see if girls of this age learned the details of the League constitution from the film, since younger pupils so consistently failed. It appears that this Form VI. grasped the details little better. All treat exactly the same matters, and quite well. They explain in detail how disputes are settled and expenses met. They give with regret the names of the countries not yet members of the League. But they mention none of the administrative organs of the League except the Council. Perhaps the wording of the essay title was too vague, but even so, it is probable that had the girls known the matter we hoped to see, this would have been included in their answers. This part of the film is not clear because of the similarity of scene.

Form IVA., 16 girls aged 14, wrote answers on—

- (1) Which part of the film did you specially enjoy?
- (2) Which did you consider the most impressive parts of the film?
- (3) What was the most important general notion which you carried away from the film?

The answers again showed that children easily grasp the argument of this film. The pictorial scenes proved for these girls both the most enjoyable and the most impressive parts of the film. Under the first heading, John Bull appears five times, the dispute between Greece and Bulgaria four times, the garden dispute thrice, and scenes in the Aaland Isles twice. The street fight and the blackened map of the war areas are each given once.

Under the second heading, eight girls mention the long rows of crosses, four the scenes of a devastated Europe, four the contrast of the cost of League and war, three the speedy termination of the Greek and Bulgarian feud. Mention is also made of the picture of soldiers blinded by poison gas, of the scenes behind the battlefield, and of the long line of ambulances transporting the wounded.

The girls give as the predominant notion gained from the film the ease with which war is started, its cruelty and cost, "the absolute necessity of the League." One child has evidently taken the lesson very much to herself and her peers, the chief idea she has gained being "how easily war could be prevented if only the middle-class people would back up and be determined about it."

Nine of the sixteen mention John Bull and all understand this illustration perfectly; the street fight is understood, but the three who mention the garden dispute have not realised that a "frontier" is in question.

The teacher's appreciative criticism of "one of the most impressive and instructive films that we have ever seen" is given later. The usual delayed test was set the Fourth Form after three months. The school report is given: "Three months have elapsed since the above film was shown to a large assembly of girls and Staff—amongst these being girls in the Fourth Forms whose average age is about 14 years. They had no preparatory lessons on the subject, and no discussion followed the showing of the film, as it was entirely divorced from the period then being studied, which was the Stuart Period. Consequently, this delayed test was a severe one, and the results of it reveal, I think, the merits of—

- (a) The usefulness of this type of film in the teaching of history.
- (b) The film as an advertising agent for the League of Nations Union.
- (c) The value of the film in teaching the history of the Great War and the origin, usefulness, and methods of working of the League of Nations.

Certainly I feel, after having read the delayed test papers, that the children have remembered the essential facts, viz.:—

- (1) The causes of warfare in general and of the Great War in particular.
- (2) The disastrous effects of the war and its almost world-wide extension.
- (3) The costliness of war compared with the comparative cheapness of an instrument of peace such as the League of Nations.

- (4) The extent of the League and the desirable completion of the chain.
 (5) The settlement of recent quarrels.

I was amazed and interested to find that these young girls remembered how war was averted between Sweden and Finland and on the Graeco-Bulgarian frontier, in the latter case in record time. It must be remembered that no class history test imposes such severe conditions as the above; lessons have been given—discussions held—essays written and text-books used—therefore the average work in such a test should be higher, and statistics prove it to be so, for out of 26 papers marked—

17 girls reach a higher average in a class test.

7 girls reach the same average in a class test.

2 girls, only, reach a lower average in a class test.

However, it is my opinion that the results of this delayed test are much better than they would have been had the girls simply had an isolated hour's lecture on the subject three months ago. So, in conclusion, I feel that the showing of this film has had really beneficial results, and I did not feel that to be the case from the results of the test after the showing of the film of 'Naval Warfare.'¹ One point I have omitted—the value of the film is shown more especially from the duller girls' papers, as they either reach a higher average than in a class test or the same. Some of the dull girls have done surprisingly well in this test."

The actual grading was :—

EXPERIMENT 103: DELAYED TEST: FORM IVA.—17 GIRLS

Same Grade, 4.	Higher Grade.	Lower Grade, 13.
2 in A		3 A to A—
1 in B+		3 A to B+
1 in B		1 A to B
		1 A— to B+
		1 B+ to B
		1 B+ to C+
		3 B to B—

FORM IVB.—9 GIRLS

Same Grade, 3.	Higher Grade, 1.	Lower Grade, 5.
1 in A—	1 B to A	1 A— to B+
1 in C+		1 B+ to B++
1 in B		2 B to B—
		1 B to C+

¹ Experiment 96 was carried out in this school.

306. Experiment 104. In the remaining four experiments the League film was shown to classes already to some extent acquainted with League activities through the meetings of School branches of the League of Nations Union. In the first of these cases, the film was shown to the Upper Forms of a Girls' Secondary School in Leeds. In the following discussion, the Headmistress aimed at discovering whether the girls had gained anything from the film impossible or difficult to convey in other ways. She came to the conclusion that this was the case. The girls felt that they had actually known beforehand most of the subject matter of the film, but it had brought home to them, as nothing else had done, the fact of the close interdependence of nations.

307. Experiment 105. The Upper Forms of another Girls' Secondary School saw the film. Two forms were tested without any oral lesson, 31 girls from IV. Middle and 11 girls from VI. Upper. This was the first experiment with this film in a Secondary School where the immediate test was a free essay on the film. Hence the exercises are examined in detail. Boys and girls in a good average Elementary School from the age of 11+ learn and remember the general argument of this film and some detail from one showing. Can these girls do more? The Fourth Form was only a little older than the Senior standards already examined¹; the girls' ages varied from 13+ to 14+. The film was too long for these Middle school girls to learn exact details, though they grasped the film well. For instance, all speak of the causes of the war, but few mention the dispute between Serbia and Austria. A typical treatment is: "We were first shown how the war started by two small boys quarrelling, and how other lands kept gathering up and helping in the war until nearly all the world was taking part." Most refer to the wide extent of the war, describe the havoc of Central Europe, this far less fully than younger children, the formation of the League and its work in settling boundary disputes. The majority describe the dispute over the Aaland Islands and the Bulgarian frontier at some length. These girls devote more space to the work of the League than the results of the war, though such sentences as this are common: "This film was a great eye-opener to some of us who were only born during the war. We had only heard of the awful starvation and loss and devastation, but everything was shown to us fully and clearly by this film." There are only three essays which are not fairly comprehensive. Of these, two writers expend all their time in explaining the League's objects and in giving detail of the two disputes depicted at length on the film. All are concerned at the broken links in the chain of peace. They have received a notion of the expense of war and of the resultant burden of taxation, but have confused the various figures given. They do not seem to remember the table showing that each country helps to support the League. One thinks the League is helping the several countries to repay war debts. Only two girls attempt to deal with the organisation of the League. One of these mentions the Assembly and the Court, the

¹ *Supra*, 136, 139, 175, 177, 179.

other the Council and the I.L.O. The majority lay no stress on the analogies. When mentioned, these are understood except in three cases. They realise that the war caused changes of frontier, though they give no details of the new countries formed. The teacher needs to give such precise information of numbers, places, lists of committees, lists of new countries beforehand, or drive it home later, or teach it by using one reel at a time slowly and with stops. No teacher would expect to teach anything like this amount of material with precision in one hour's oral talk. The film, to reach its maximum effect, must be used in combination with other lessons. Unaided, it can convey the ideas of the wrong of war and the concreteness of the League, essential notions given quickly, impressively, and thoroughly.

The eleven Sixth Form essays naturally exhibit the same grip of the subject with a more exact knowledge of detail. Three fully describe the constitution of the League, and four others mention two or three sections, and say that there are "other committees." Three of these girls quote all the new countries formed in Europe after the war. They have understood the figures better, realise, unlike the younger girls, how the League obtains supplies. One writes: "An interesting chart was also given illustrating the amounts which members of the League of Nations pay towards its expenses, according to their size and wealth."

Too few Senior girls remained for the delayed results to be given, but 23 of the Fourth Form wrote the usual delayed test five months later. The teacher wrote of the delayed tests: "The children have, on the whole, remembered it well, though some are not clear as to the street fight, do not realise that it was not an illustration. These people had not time to finish all that they remembered, but I think there is enough to illustrate their grasp of it. On the whole there is no great divergence between the mark in this and the usual mark, though I should say the mark here is on the whole a little below the usual one. But the same type of inaccuracy occurs, e.g. 'The League settled a dispute between two countries.' Many children do not attempt to say what two countries." The teacher considered that the slightly lower general mark was probably due to the large amount of matter dealt with in one hour, the absence of oral discussion, and the lapse of time. She differentiated between the helpful and less helpful parts of the film:—

"*Helpful.* (a) The maps illustrating the rapid spreading of the war area struck me as particularly good and clear. The blackening-in was very effective—much more so than a single map or series in a text-book. This *type* of illustration struck me as being of great value.

(b) The illustration of the disputes and the appeals to Geneva were good and effective. The arrows driving to Geneva were clear and forceful.

(c) The preliminary illustration of the street brawl was clear and simple, but it struck me that the transition from the settlement of the dispute to world war was somewhat sudden. The slow child would hardly find the connection between that and Serajevo.

Less Helpful. There seemed to be a waste of time over John Bull's expenditure. It went on for too long and was not clear. The packages were not easily comparable because they were always being moved, and the figures were not very clear.

Girls' attitude to the films. The girls found the films interesting. Most of the older girls enjoyed the League film better than the Wolfe one.¹ The older girls were tired, for they had just completed their School Certificate examination, so perhaps the League was a greater change. Several of them said that they thought the postal packages were a waste of time." On the other hand, I heard privately of one girl in the Middle school who enjoyed the Wolfe film, but was "thoroughly bored" with the film on the League.

308. Experiment 106. After a similar mass showing to the Upper Forms of another Girls' School, 21 girls aged 16, in the School Certificate Form, wrote an essay: "From the information given by the film, justify the existence of the League"—as their mistress remarked, "A normal School Certificate question." The teacher reported: "Very few knew any detail about the League before. The girls have certainly grasped the essential points, and on the whole the stupid ones have gripped far more than usual, are, in fact, practically equal to the good ones. The dull were certainly stimulated. All seem to remember practically the whole of the film. I think it is a great aid to teaching, but it should be shorter, and the Constitution of the League part would be better all in writing."

The grading is:—

Same Grade, 5.	Higher Grade, 14.	Lower Grade, 2.
3 in B+	3 A- to A	1 A- to B
1 in B	2 B+ to A	1 B to B-
1 in B-	1 B to B+	
	1 C+ to B-	
	2 C to B	
	1 C to B-	
	1 C- to B+	
	1 C+ to B	
	1 C+ to A-	
	1 C to B+	

The teacher discussed the films with all the forms present, found that in general the film had been well understood, but that some of the younger children present, aged 13, had not understood the analogies. In the form below the one tested, the girls were told casually that the teacher would be quite interested to read their opinions on the film if they cared to set them down. The teacher was pleased to receive, among others, a paper from "an average child, usually apathetic and uninterested," another

¹ *Supra*, 291. Experiment 91 was performed in this school.

mark of the interest that a film often succeeds in arousing in backward children.

Several of the mistresses saw the film and discussed it with their classes. Experiments 10, 111, and 112 were also carried out in this school. The staff who had taken part in the experiments came to the common conclusion that films used from time to time were a useful aid, and that the best and worst girls profited the most, many of the dull being stimulated to an unwonted interest, the clever to criticism.

309. Experiment 107. Finally the film was shown to 150 girls in a Public School. The teacher's very full report is appended :—

“(a) **PERSONAL OPINION.** I thought the film was very good indeed. It gave an excellent résumé of the causes and results of the war and the need for the League. The analogies were clear, and the pictures showing the working of the League also straightforward. The maps and diagrams were mixed in cleverly with the pictorial parts, so that all tastes were catered for. The map showing how the war became a World War seemed to me to be particularly effective. I also liked the arrangement of the subject matter.

(b) **REPORT ON TESTS.** I have had written tests from 60 children ranging from 12 to 16 in age, and have carried out oral tests in other forms as well.

(c) **MARKS.** In most cases the marks were higher, or the same, than the average mark obtained by the child for ordinary work. Only in nine instances were the marks below average. This seems to prove that the film made more impression than an ordinary lesson. In several instances the cleverest children, who usually head their form lists, did not do as well in proportion as the duller children ; whereas one particularly muddled-headed girl wrote a clear answer and remembered most incidents of the film in their right order.

(d) **SPECIAL POINTS OF INTEREST.** In nearly every case the map of the world showing how the war became a World War made a deep impression. This seemed a most effective method of explaining what may otherwise be a dull recital of names. Only in a few cases were the other maps and diagrams noted and remembered. The most impression was made by the pictures of the war and its effects. The lesson of these pictures appears to have been fully grasped in every case. The pictures of the war, of hospitals and cemeteries, etc., were carefully noted and fully described afterwards.

(e) **ANALOGIES :—**

(1) Out of sixty papers only one mention was made of the analogy of jealous neighbours.

(2) Most children noted the street fight ; it amused them and interested them, and they grasped the analogy. One or two of the duller children failed to grasp its meaning, but these were quite

definitely the children who are slow to grasp any new fact, or follow a chain of reasoning.

(3) Seven made special mention of 'John Bull's burdens,' and four others made references to war debts. This analogy appears to have been grasped.

(4) Twelve references were made to the 'chain round World Peace,' and whenever mentioned it appears to have been understood.

(5) The Garden Dispute—as for No. 2. Analogies taken from everyday life certainly seem the best method of explaining situations, judging from the above.

(f) ESSENTIAL POINTS. The essential points were remembered :—

The evil effects of war	} grasped and remembered.
The creation of the League	
The work of the League	

(g) GENERAL REMARKS :—

(1) The pictorial parts of the film were better remembered than the maps and diagrams.

(2) All except one of the audience had already heard about the League of Nations, and had attended a Model Assembly. Whether the results would have been so good had this not been the case is questionable. However, most of them mentioned the quarrel between Sweden and Finland over the Åland Islands, about which they had no previous knowledge.

(3) No one of them knew they were to be tested afterwards, so did not make any special effort of memory.

(4) The film was a novelty in school, and therefore aroused interest. Were films to be used frequently for history lessons, I doubt if the same results would be attained.

(5) A film in conjunction with ordinary history teaching, or, as in this case, shown at an interval after the lesson on the subject, seems an excellent method of fixing facts in children's minds, but I doubt its efficacy as a sole method of teaching.

Tests

ANALYSIS OF MARKS

First Test.—"The World War and After"

Form.	Age.	No.	Below Average.	Average.	Above.	Verdict.
VB. Upper .	15+	16	3	6	7	Above
VB. Lower .	15+	13	1	3	9	Above
IVA. Upper .	14	16	3	5	8	Above
IVA. Lower .	14	14	2	7	4	Average

REMARKS MADE BY THE GIRLS THEMSELVES ABOUT THE LEAGUE
OF NATIONS FILM

School Certificate Form (Age 16). Unanimous opinion on the excellence of the diagram showing how the war became a World War. (The world going black on the film.) Why was the quarrel between the Greek and Bulgarian sentry so vague? Which killed which? Which was in the wrong? Why were the Aaland Islands given to Finland? Was the dispute really settled as easily as the film would lead one to suppose? Analogies grasped clearly by the whole form.

IVB. (Age 12-13). 'The film was lovely'—unanimous chorus from the form.

Film considered most interesting and clear.

Analogy of boundary of gardens grasped by most.

VB. Lower (Age 15-16). 'It was very clear the way the countries were blackened-in to show which were fighting.'

'Too much was made of the hospitals.'

'Which was killed? The Bulgarian or the Greek sentry?''

310. Summary. All the teachers concerned in these eight tests with the League film were impressed with its value as a teaching aid, even with the oldest scholars.

CHAPTER XII

GENERAL CONCLUSIONS ON THE USE OF THE FILM IN SECONDARY SCHOOLS

311. Reason for Separate Consideration. The general question of what advantages may be looked for in the use of the school film have been discussed in Chapter IX. It was decided to review separately the tests taken in Secondary Schools, for it was found during the enquiry that many teachers, unless they had had some experience of the film in school, inclined to the view that though the film might be useful for young scholars, in schools with little library equipment, or in those where the children came from illiterate homes, there was no need for it and no time in the Secondary School. The tests have shown that there is little warrant for such views. It is proposed briefly to consider how far the chief conclusions reached in Chapter IX. apply to the Secondary Schools.

312. The Film in Junior Forms. Those conclusions were based on work with children up to the age of 14. Comparatively few of the tests in the Secondary Schools were concerned with children of this age, but in those taken results are very similar to those earlier found. Three of the first experiments with equated groups were taken with the Junior Forms of Secondary Schools. In Experiment 8 with boys of 12, and Experiment 10 with girls just over 13, the Wolfe film was used. There was little difference in either first or second tests between the groups, but three of the worst boys of the film group did far better than usual in the delayed test in Experiment 8. In Experiment 17, though again the grading varied little from normal, the standard in the delayed tests was a little higher than usual, taking the form as a whole, and the nine girls usually lowest in the class all improve. The teachers thought the films valuable for their depiction of background. "The children realised far more clearly the life of those times." "The settings are extremely valuable." Experiments 73 to 77 were informal tests with films *a*, *b*, and *c*.

All the teachers remarked on the children's eager discussion and the better realisation of conditions given by the film. In Experiment 75, children of 10+ learned from the film many points which had escaped their notice in the pictures in their books and in the classroom. This brings forward the point made by one teacher in conversation that, whether or no the film way is intrinsically better than other ways, being the modern way it is more suited than others to the modern child. A generation ago, children looked eagerly at the infrequent illustrations

with which they were supplied. Nowadays, children's books are so profusely illustrated, and all save the poorest children have so many picture-books, that they give less attention to the detail of a still picture by the time they are of school age. Although the teacher should certainly train the child to use a still picture properly, in these circumstances the film is all the more an aid. The movement in the film attracts attention to matters not clearly realised in a still illustration. Although children may have many books and a wealth of illustration, the film is not a superfluous adjunct even for the teaching of detail, and, as the mistress in Experiment 75 says in her report, for these children, as for others, the film seems to have power above other means to bring the people of history to life.

313. Comparison of Film and Lantern. This is an aspect of the subject insufficiently realised by many Secondary School teachers who have not seen the film in use, and who judge it solely by its potential powers of imparting information. They consider that for this the lantern would be of more use. One teacher, in his report, deals with this question. His form, a Second Form aged 11+, saw the first reel of the Roman Britain film and also the Wolfe film, when these were projected for older classes. His views are based on his own following discussion with his class :—

“The most effective films would appear to be those concerned mainly with biography and incident, where history can be shown to be concerned with the lives of men and women, and where events and episodes can be woven into a story. Of the two films seen by the boys of my own form the ‘Taking of Quebec’ was better appreciated. This was largely because, as the boys said, there was ‘more story’ in it. Good acting and dramatic episode will always appeal to the children and will help to give them lasting impressions. The boys seem to have been impressed by the film portraits of Wolfe, Montcalm, and the Governor-General, as much as by the representation of how Quebec was taken.

Given characters and incident—dramatic incident—I think such films will be most helpful in the teaching of Lower Forms. While it is, of course, desirable that details of costume, environment, and of the general background in the scenes should be accurate, or as accurate as we can make them, it does not seem to me that we can rely on the film to teach these things. These things to be studied would require a slowing-up of the film, and probably some commentary by the teacher. In that case the teaching might be quite as effective with the aid of lantern slides and also less expensive. The important thing is to convey to the pupils a general view and impression of a subject by the film. If the film awakens interest and arouses the sympathy of the pupils for the persons shown and conveys accurately the broad ideas, it will serve its purpose. The purpose of the film should be somewhat akin to that of the historical novel. It should enthuse and inspire.”

I decidedly agree that the film is of more value for the rousing of interest and the giving of life than for the teaching of detail, yet the sense

of actuality created by the film largely inheres in its detailed presentation of setting. It is, of course, true that details of costume, architecture, and so forth can be equally well studied through the lantern slide as through the film, or by means of still illustrations. In Experiment 2 of the formal tests, children learnt the dress of the Bronze Age better from a large black-and-white illustration than from the unstopped film¹; in Experiment 4, children who saw still pictures of the Roman soldier as well as the film obtained better results in the drawing tests than those who merely saw the film, though frequent stops were made.² We need all our aids. But, though details may be learnt from motionless pictures, they give no composite picture of the age. "The general view and impression" which is felt so important in the report under consideration, and is so well conveyed by the film, is not attained. Moreover, the film at one and the same time teaches detail and brings people to life. The matter is pertinently put by another teacher, who says, after an experiment with the last two reels of the Roman Britain film: "The pupils have got much more than mere facts from the film, and such facts as they have are more living than they would be if got from verbal instruction or motionless pictures. The soldier is real as well as his armour, and he is immediately real: a good teacher may be able to make her subject live, but at the expense of much time and ingenuity; the film does it at once."

314. Questionnaire to Junior Forms, Set F and Set G, on the Value of Films. Set F of the formal tests, girls aged 12 years 11 months, in a Secondary School, and Set G, boys aged 12 years 8 months, answered questions on the value of the film after the completion of the five formal experiments. Amongst the sixty-six girls only one says: "You can think the people more real," but a large number say that they can understand things better from the film than from lessons, and that the film is more interesting and more clear, so that "the duller would take more in." "It gives a better picture than imagining," is a common view. Two or three again like the film because "I know it is right." Most refer to the interest in the details of dress and custom given. All the girls found the film helpful for some one of these reasons. The boys were unanimously of the same opinion. They give much the same reasons as the girls, but seem more impressed with the reality of the film presentation. "It looks as if you were with the people." "It is just as if we were walking round ourselves." "If you were told what the Romans were like it isn't as good as actually seeing a Roman in his armour." Many mention the topographical detail they learn. "The film would show us what kind of a place the battles were fought." They are interested in the everyday life of the past. "When we see the costumes and ways of the people, their habits and manners, their homes, the life they lead, their features, their weapons and implements, their livestock, we enjoy it very much indeed." The film for them, too, "clears things up if a boy is a bit doubtful."

¹ *Supra*, 54, 56, 69, 75.

² *Supra*, 90 (1).

Many say frankly that the film is "more enjoyable"; one argues, "and this makes people want more to learn history . . . and people who think history lessons are dry will change their minds." Junior classes and all their teachers who took part in an experiment felt that history would be better learned from the use of the film.

315. The Film in Middle Forms. Another important group of pupils are those at the next stage, aged from 14 to 15 years old, the Middle Classes of the Secondary School and the oldest scholars of the new Senior school. Thirteen tests were made with pupils of this age.¹ In one of these cases, Experiment 8, the Wolfe film was used with approximately equated groups for both immediate and deferred tests, the film group excelling the control group in the deferred exercise. In Experiment 2, divided groups were only used for the immediate test, and there was little variation from normal results in either first or second tests. But in this case, as in the others with the Wolfe film,² the teachers felt that the tests showed the value of the film. In Experiments 78, 80, 85, and 92, heightened interest was shown in the discussion. The teachers make the point that the papers convey no idea of the children's briskness in the oral lessons. More than usual is remembered in the delayed tests in Experiments 78, 81, 83, and 92. Many backward children have improved. The teacher felt that the very slow girls of Experiment 83 had been decidedly helped. Their imagination had been stimulated. They gave undivided attention to the screen, which could perform the function for them done by the reading of ballads, contemporary accounts, and novels for the more literary child. The teacher in Experiment 86 wrote: "The film has been of use in that it fixed the main points of the story more clearly, *e.g.* the value of sea-power in the struggle and the control of Pitt in England. It certainly helps to stimulate interest in a backward class much better than an ordinary lesson." On the other hand, the results quoted again show that the usually bright children do not always do well in film tests. The teachers in general feel that the Wolfe film had created an impression and suggested detail impossible to give in words. The Nelson film was used for Experiments 94 and 98. In the first test the film proved of no use. In the second case, the film succeeded in the object for which it was used, the giving of colour to lessons on the naval aspect of the wars of the eighteenth and early nineteenth century—an effect, the teacher felt, not procurable save through the film. In Experiments 102 and 103 the League film was used. In the first case, the teacher was chiefly pleased with the stimulating effect on the imagination of her girls, backward and clever alike. In Experiment 103 the teacher was delighted with the amount the weaker girls learned and retained.

316. The Opinion of Set H, Boys aged 14 years 10 months. Set H of the formal tests belong to this age-group. Like Sets F and G, at the end

¹ *Supra*, 103, 106, 107, 278, 280, 281, 283, 285, 292, 295, 299, 304, 305.

² *Supra*, 278, 280, 281, 283, 285, 292.

of the tests they answered a questionnaire of which one item was: "Do you think films a help in the learning of History? Give full reasons for your answer." Of 67 boys taking part, 64 were pro-film, one gave no answer. One preferred to reserve judgment; the value of the film depended on the pupils' powers of observation which, in general, he did not feel to be great, but which might improve with practice in film lessons. One was opposed to the use of films on the grounds that it was impossible to give a convincing film representation of important, historical figures. The 64 in favour of the method express, a little more maturely, the same views as younger folk. The strongest impression left from reading their papers is that they appreciate the detail of film presentation, in that it makes events more convincing and interesting than does the usual text-book outline. Their imagination is stirred. "By means of a film you can imagine that you are back in the Stone Age or Bronze Age, as the case may be, sharing the joys and pleasures and sports of the men and children, while one never can have this impression in a sunlit classroom, no matter how good their teacher is. . . . The dress of the people, their occupation, manners, housework, what they have in the house, how they made things, different kinds of animals—all these things which I have seen in the film create a picture in my mind which no History Master could." The film gives clearer conceptions. "Although Caesar accurately explains the Britons' mode of waging war from their chariots, I never had a clear conception of the actions until I saw them in the film. All Caesar's explanation does not portray to us the speed, agility, and movements of the ancient British charioteers." A large number claim that because their initial motion is clearer, they the longer remember film scenes. "To read about a battle and to see it are two very different things. All these scenes are flashed on to the screen and they imprint a replica on your mind to be remembered for a long time." Again, many distrust their own imagination. "You cannot picture things properly because you think of modern things which are vastly different." "No matter how carefully the description may be written in a book, it is most difficult to get the right impression." Some cannot picture events sufficiently quickly from the teacher's words. "To some people the effort of picturing what is being told takes longer than he or she is hearing the next few words. Therefore they either picture some of the lesson and leave the rest, or just obtain a vague vision or idea of it. Now, when the film is shown to you, you are saved the expense of imagining it in your mind, and can thus spare your thoughts towards 'taking in' the picture." Some claim that time is saved. "Much more knowledge can be conveyed in a short time by a film than can be conveyed in a whole ordinary lesson. During a three-quarter-hour period I learned more about Roman Britain than I ever learned before by the old method." (He saw Reel II., 15 minutes film, 30 minutes discussion.) Another boy thinks that while less material is presented it is more firmly impressed. "The film impresses the subject on the mind and the recollections remain far longer than the facts from books. Though the films cannot deal with the subject on a very large scale, and do not do as

much as is done in one ordinary history lesson, the ground covered, if carefully explained, will go much further." Many note that they need must concentrate, since the room is dark. In any case they are interested, "and one learns better when one is interested." The Senior History Master wondered how far the boys' appreciation was liking for a "soft option," but the fact that the film lessons were followed by tests had not diminished the boys' interest, and results showed that they had learned much.¹ In general, these papers strengthen the impression gained from the other experiments that the conclusions reached for younger children hold in all particulars for pupils of from 14 to 15. For them, too, the film supplies background, gives life, stimulates interest, and helps the backward in an unprecedented way.

317. The Film in Senior Forms: The Film as an Illustration. There remain twenty-six experiments with pupils ranging in age from 15+ to 18.² It is not easy to generalise on results. Two masters, judging from work with their classes, felt that for boys over 14+ films might be of occasional service as illustrations, but not in other ways.³ A third felt that, merely as an illustration, the use of the film from time to time would be justified, for other types of illustrations were "relatively inexpressive."

318. Some Senior Students felt that the Time could more profitably be spent with Books. Scholars of 15+ and over have reached the age when they need less formal instruction. When school equipment allows it, their history work can increasingly become a matter of guided reading, and the historically minded enjoy the new freedom, the delight of discovering material for themselves. Consequently, the film method, to such pupils, is a return upon childish things. A teacher told me about a formal debate in a class of 31 girls of average age barely 15, as to whether they would like regularly to see historical films. The most popular statement against the film was that it was better to spend the time on reference books; contemporary accounts and such things were more interesting and made the period more real than the film. These girls had seen the Nelson and the League films, disliked the first, but appreciated the second. The motion that films were a help was finally carried by the narrow majority of 17 over 14. In another case, where 16 girls aged 15½ saw the Wolfe film, 6 of these thought that they could more profitably have employed the time with books, though the rest of the class felt that the film had given them a clearer idea of the campaign.⁴

319. Senior Scholars and Character Portrayal on the Film. The dissentient group in the last case considered that the film, far from giving actuality, conveyed a false impression, for Wolfe was unrealistically portrayed. I do not think that with these older forms the function of the

¹ *Supra*, 50, 70, 72, 73, 77.

² *Supra*, 102, 107, 108, 111, 279, 281, 282, 286, 291, 293, 296-8, 300-3, 305-9.

³ *Supra*, 281, 289.

⁴ *Supra*, 282.

film is to make the past live, as with the younger child. Certainly, even older scholars can be carried away by the historical film as by the ordinary cinema picture. It was a School Certificate girl who "could almost have cheered" when the scout ship at Quebec proved to be English. But older pupils critically regard the film as a reconstruction. Does it in general travesty their notions of historical personages and so produce an effect of unreality? The answers of the boys of Set H on the value of the film in some cases illustrate the danger; in spite of the boys' esteem for the film method, several criticise the portrayal of Wolfe and Pitt. "The film, however, does not show the type of men who have led England. There was no sternness nor any indication of the personality of Pitt shown by the film, which may be misleading. His features were very unlike Pitt." Knowing this, a good deal of attention was paid to the question in discussion with Senior Classes, but the large majority of pupils felt that the Wolfe film gave them a closer insight into the personalities of the leaders. A Matriculation Class of boys discussed the film delineations with interest.¹ Scholars even welcomed the infrequent appearances of Nelson in the Naval film.²

320. The Value of Detail. In general, teachers and Senior scholars felt that the value of the film for them was the presentation of events in detail. Two quotations from teachers' reports will suffice to put this point of view. "There is so much to be dealt with in history teaching that important movements are often taken very broadly; and a film such as the Wolfe one readjusts the balance between broad outlines and detailed teaching. As proved by the opinion of the children, the details make the story more interesting, whereas the broad outlines are necessary to show the forces at work. These were not ignored in the Wolfe film, which emphasised the importance of sea-power and pointed out the rivalry of the French and English." "In the Upper Forms there is less use for this narrative method. We are more concerned with the discussion of the meaning of events and movements, the growth of ideas and ideals, and the presentation of the outlook of the times. But even here there might be a profitable and very occasional use of the film if critical events in the history of a people could be presented. The impression made would be deepened, particularly because of the contrast of this method with the usual classroom methods." The detail learned from one film carries interest over to other topics. One teacher writes: "It is interesting also to note the correlation of details seen in the film with facts read in books. Soon after the seeing of the Wolfe film, I was reading with the same class selections from Hakluyt's *Voyages*, where mention was made of the need in time of difficulties for one ship to signal to another by lights. Immediately, one girl compared it with the use of lights in the Wolfe film as a signal for the ships to start."

321. The Pictorial Film with Senior Classes can be used not only as an

¹ *Supra*, 285, 286, 292, 293.

² *Supra*, 298, 300.

Illustration, but as a Definite Teaching Instrument to train Critical Ability.

One mistress who took discussion lessons with her School Certificate scholars after they had seen first the Wolfe and then the Nelson film, reported in both cases that the films had been valuable for these classes as providing a basis for discussion.¹ Experiments 93 and 99, two tests with Matriculation Classes, one in a London and one in a Yorkshire school, show that the pictorial film can be so handled with Senior Classes that it becomes an instrument for training a critical judgment both on historical events and on films in general. The racy, spontaneous criticisms of boys aged 16+ on the battle scenes in the Wolfe film in Experiment 90, and those of the boys of Experiment 99 on the devices and technique of the Naval film, indicate the existence of the boys' critical interest, providing for the teacher a line of approach to his own ends.

322. Even with Senior Classes Films stimulate the Imagination.

Though the training of a critical outlook is the best result to be anticipated in the use of the cinema in Senior Forms, there has been plenty of indication that here, too, the imagination will be stimulated by the increased capacity of thinking of history in terms of living men and women. For instance, some members of a Sixth Form, working for the Higher Certificate examination, saw the League film. They had been studying the eighteenth century. "Wouldn't it be a help to have a film on the Industrial Revolution?" they said. It was suggested that, in default of a film, they should write their own scenario. The result is given in Appendix C.

323. The Diagrammatic Film in Senior Classes. Several teachers feel, wrongly, I think, in the light of such results as those considered in the last three paragraphs, that the pictorial film is of little use for Senior Classes. In only two cases out of the nineteen tests taken is this the view of those who have taken a discussion lesson with Senior Forms after the showing of a pictorial film. The suggestion is frequently made that diagrammatic films might prove useful for Upper Forms: "In Senior Forms where ideas are more important than things, the film can be of little assistance except for the portrayal of maps, plans of action, etc., which would alter to illustrate development of a campaign, the results of a treaty, the effects of the Industrial Revolution, intensity of population, etc.; in these cases the film could render valuable assistance to the teacher, but more particularly if the film could be run parallel to the oral work." Another teacher suggested short films taking not more than from 5 to 10 minutes, preferably 5, at the end of lessons with Senior Forms, giving animated diagrams showing interrelated connections like those used by H. G. Wells in his *Outlines of History*. This view of the value of the diagrammatic film for Senior scholars is borne out by the success of the League film in the Upper Forms of schools. Pupils over 16, asked which parts they prefer in this film, invariably say the maps and diagrams. A class aged only 14+ once

¹ *Supra*, 292, 296; *infra*, 393.

unanimously gave this reply. Girls of 15, while often preferring the pictorial portions, took an intelligent interest in the diagrammatic parts. All scholars pass favourable comments on the animated maps in the Wolfe film. The genuine enthusiasm of the Matriculation boys of Experiment 99 for the animated diagrams and maps of the Nelson film led their master to comment in his report on the evident scope for films of this kind in the Upper School.

324. Suitable Films are of Value in the Most Senior Forms. "My impression of the films, and of the children's appreciation of them, is that they are very helpful for the visualisation of social conditions, *e.g.* dress, housing, and of definite action, but greater care is still necessary to secure the elimination of error. A great part, however, of history does and must consist of study of cause and effect on too wide a scale for the film to be of value in this part of the work, at least until still greater improvements have been made." The last criticism of this teacher is frequently made by many who, like her, realise the value of the film for infusing life into topics of social history. It is generally passed without this critic's open-minded, qualifying rider. The criticism is allied to the view that the film, being episodic, can be of little use for older pupils. The film dealing with one episode can be of much value, worth the time for older pupils, if it is an episode typifying many other similar events; Form V. would see the Wolfe film, not so much to learn how Quebec was taken, but to get colour and atmosphere for the dreary and interminable wars of the eighteenth century. And, in any case, films need not be merely episodic, even apart from the film of social life. "The World War and After" already stands as disproof of this charge. The League film was shown seven times to the Upper half of a Secondary School, once to boys aged 15+, and in a Central School. In every case the School Certificate Form or older pupils either did written exercises or took part in a follow-up discussion; in some cases they did both. The results showed that the oldest scholars can be stimulated to active thought on vital matters through the medium of a suitable film. This has been shown in the detailed accounts of the experiments¹; the whole question of the capacity of the film for the treatment of relations of cause and effect in history and for the teaching of the ideas which have actuated men is dealt with in a later section.²

325. Among Senior Scholars the Best and Worst Groups derive most Benefit from the Film. Again, the grading quoted shows that many of the weaker children respond to the film lesson better than to the purely oral lesson, and that, though less often, a few bright children lose their position.³ On the whole, however, the teachers considered that in Upper classes the clever and the dull groups derived the most profit from the films. The advantage to the bright appeared in the discussion classes,

¹ *Supra*, 108-10, 302, 304-10.

² *Infra*, 400.

³ *E.g. supra*. The analyses of marks illustrate both these points. *E.g.* 270, 271, 281, 287, 290, 292, 299, 300, 308, 309.

when these girls wanted to discuss and criticise the film in the light of previous knowledge, a reaction which shows that thought has been awakened, and which can only lead to deeper grasp of the subject. The duller children often showed in their papers an unusual knowledge of fact, and in their lessons increased desire to take part. In the one case critical thought has been stirred, in the other, interest roused.

326. The Method of Using the Film : The Oldest Pupils need accompanying Lessons. These tests have amply confirmed the earlier conclusions on the method of using the film, especially the view that the film should be used in conjunction with oral teaching ; the higher the form the more is this necessary. If we are looking for development of sound habits of criticism in using the film with older children, we must naturally allow time for free play of expression after the showing.

327. Use as Introduction and Summary. The many tests where the League film was used with somewhat older children have especially illustrated the value of a combination of visual and oral methods and the varying ways in which the film can be put to use. In the first place, the tests with the League film have particularly illustrated the value of the film as an introduction to the study of a difficult subject. In using the purely pictorial film along with lessons, it seems that usually the function of the oral lesson is to provide an outline of events, that of the film to supply detail. When the League film is used as an introduction, the reverse process becomes necessary. From one showing of the film the children learn the general arguments and a certain amount of detail, really a prodigious amount, but by no means all in the film. Older pupils realise that much has escaped them. The interesting point is that they feel aggrieved that they missed, say, the names of some of the European States newly made in 1918, or of the different bodies of the League ; they are anxious to make these deficiencies good. The film gives a vivid general impression. Precise detail is then learned in ordinary lessons, and the task of learning the detail is attacked with vigour, for the film has made the children really want to know. Five tests with the film were taken with children who had no preliminary knowledge.¹ Only one following lesson was taken in each case, but these illustrated the decided advantage of the film in arousing strong interest as a preliminary to detailed study. On the other hand, the film can equally well be used after lessons. In this case, oral teaching will have given the requisite knowledge of detail. Then, the film will effectively clinch what is already to some extent known. The detail learned, the film gives meaning to cold facts, shows more graphically and realistically than oral teaching can, the scenes of devastated Europe, the frontier trouble in the Balkans, and leaves a final strong impression, a synthesised view of the whole. In Experiment 15 one set of girls had a lecture on the League, saw the film, then wrote an essay giving their views on the value of the film. They wrote : " For actual

¹ *Supra*, 302, 303, 304—3 classes tested.

facts and dates a lecture is easier, but for pictorial scenes and scenes containing action the film is most helpful." "The film made the subject matter rather more interesting, but the lecture gave the more important details in a clearer way." "I do not think I learned anything more from the film as far as facts were concerned, but it was more realistic and interesting." "I learned the facts from the lecture, and the film amplified them and made them clearer and more interesting." This is the general view; the value of combination is clear. The use of the League film has plainly shown that, according to the object in view, a film may be used either as an introduction or after some previous lessons. So long as a child is not expected to remember all the detail of a long film from one view, in the absence of previous acquaintance with its subject matter, and so long as the film is not the last lesson of all on a topic, the presentation of the film at any point during the study of a wide subject can be made by skilful use to yield valuable results. In most of the tests in the Secondary Schools the films were taken after lessons. In one case the Wolfe film was most successfully used as an introduction to the study of the Conquest of Canada. In the following lessons on the whole subject, the interest may be described as exuberant.¹ Two other tests seem particularly interesting, Experiments 88 and 98, when the Wolfe and Nelson films were successfully used, not to teach any series of events with precision, but to give colour to lessons on the eighteenth-century wars.

328. Comment helps even Senior Scholars. Comment proved helpful even with the oldest classes. The scholars' opinion on this point was enquired. Group A in both Sets F and G had film lessons with the film shown in silence, and one with a stopped film and a running oral commentary. Of the girls, 15 of the 20 preferred explanation with the film; amongst the 18 boys present of the group when the query was put, 9 preferred explanation, 8 the film in silence, 1 was undecided. In Set H, aged 14 years 10 months, all the 68 boys tested had seen films shown in both ways; 38 preferred comment, 30 the silent film. In all sets the same reasons affect decision. Some children feel that the commentary destroys the sense of reality; always there is a small majority for the group that appreciates immediate removal of possible difficulties by accompanying explanation. In the Secondary Schools the improvement in results with the Naval film according to the amount of oral help given points the value of comment even with School Certificate classes. The boys of Experiment 99, who received the maximum of explanation, achieved by far the best results.

329. Frequency of Use of the Film. Few teachers in the Secondary Schools think that the film should be very often used.² They feel that its function with the younger forms in arousing interest in history as a

¹ *Supra*, 278.

² *Supra*. The master in Experiment 93 felt that he could well make use of a film three times a term.

living subject concerned with very human people can be accomplished from occasional showings. Once the idea has captured the imagination of the child through the film presentation of one topic, other subjects take on fresh life though studied in the ordinary way. Detailed presentation of critical events or of social conditions is valuable from time to time for all scholars up to the age of 15+, but exigencies of the syllabus forbid too frequent use. And if the films are chosen wisely, one or two films can suggest conditions of social life true in their broad features for a long period.

330. The Relation of School History Teaching to the Public Cinema.

Perhaps here may be considered the relation of school history teaching to the public cinema. Teachers in Secondary Schools seem to feel even more strongly than those in the Elementary School that the school film-showing should help to resist the harmful effect of frequent picture-going. "Is there not the need to counteract the tendency to develop the 'cinema' mind and 'cinema' intelligence? Can the film be used not merely for the purpose of historical teaching but also for correcting some of the faults of mental attitude and reaction to circumstances which are the product of frequent attendance at cinema shows?" That this can be combined with a training in historical criticism has already been shown. On the whole, however, teachers appear to think that the historical films of the picture palace have been a help to history teaching rather than the reverse. Children ask questions at school about the films they have seen elsewhere, a mark of the power of the film to arouse interest. The danger lies in the inaccuracies that so frequently occur. Children were interested in the Robin Hood film, but acquired from it peculiar ideas on the use of the long-bow. Films such as "Sea-Hawk" made the contrast between English sailing ships and galleys in the Elizabethan period plain. Many teachers have referred to their children's questionings on the Ben Hur film. One master said every child in the British Islands appeared to have seen that film; it was inaccurate, the equipment of the soldiers, for instance, not being in all points correct, but he found his attempts to explain the trireme much facilitated by his boys' knowledge of the film; and his pupils had certainly acquired from the picture a strong impression of the might and power of Rome. The same teacher found when dealing with Ancient History in Lower Forms that the names of the Gods and something of the hierarchy of heaven were known to many of the class from a film recently in the town burlesquing the deities of Olympus. He thought children remembered a good deal from the ordinary cinema picture, and later wrote in his report on tests with his boys: "Whether we like it or no, the commercial cinema has a strong influence already, and many boys are first introduced to certain historical characters and events by the film. It is for the teacher to see films with historical background and make what use he can of them. If the cinema should win a place in the school it can gain much from the commercial cinema. Out of the Topical Budgets the films of some historical events are worth pre-

serving, and teachers of history should be able to make good use of a National Film Library such as is, I believe, already in existence.¹ Historic events like the founding of the Roman Empire and the Commonwealth of Australia would probably be filmed nowadays. Captain Scott's expedition and General Allenby's entry into Jerusalem seen on films have left lasting impressions on my mind. It should be possible from the great output of to-day to select many films or parts of films which would be of great value in schools, to add to those that are produced definitely with educational purpose. I do not think that the supply of suitable films would be the greatest of our difficulties." Other remarks on the point are: "They (cinema films) have introduced names and epochs, cf. Richelieu, Three Musketeers, Notre Dame, and given a vivid and, on the whole, good impression." "Ordinary picture-house films with historical settings are generally popular. The children come and say that they have seen so-and-so at the pictures, and are full of the details, which seems to show that there is a real need for good films." I had interesting letters from one teacher who, since 1926, has been in the habit of taking his scholars to suitable films shown in the local cinema. He writes: "The result of film-showing to pupils of mine has almost invariably been good. It has been my custom to prepare the children beforehand by a talk relevant to the film and afterwards to give them an opportunity to express the views they have formed, sometimes in notes, sometimes in continuous narrative, and also at intervals in criticism. In this way I think they have derived very nearly a maximum of good from the film. Of course, individual tendencies and characteristics will always cause the same film to produce various results, sometimes almost opposite. I have become convinced that usually too much is crowded into a short film, and children are unable to retain more than a few facts unless the piece is made so sensational as to become almost impossible and objectionable from an educational point of view.

War films, of which 'Wings' is typical, excite in children just those feelings which the League of Nations and Education are trying to kill. Many of the children who saw this film felt that the men who take part in war are heroes, and wish to imitate them, and they express a desire to be able to go and do likewise. They were so impressed with the wonder, the pageantry, the magnificence, and the marvel of war, that they did not see the horrors of it.²

However, I found that 'Chang' and 'Simba' have created a keen interest in Nature and in the people and animals of foreign lands. The educational value of such films is high. Another type of film which I have proved to have high educational value is that which portrays the life of great musicians and which is accompanied by selections from the works of the composer whose life is portrayed. This has impressed more

¹ Unfortunately this does not seem to be the case.

² A detailed enquiry into the effect of war films on children elicited that in general war films have on children the reverse effect; the children are impressed with the horror of war. See the Educational Survey (League of Nations), July 1929, *Children and War Films*, C. M. Wilson.

deeply upon me what I felt three years ago, that the biographical film usually makes the strongest appeal.

But I am convinced that films not constructed expressly for school children and educational purposes will be absolutely useless unless they are produced with the guidance of educationists who will see that details are correct, that ambiguity and false impressions will not be created, that pure sensationalism is not allowed to play any part, and that there is excluded anything which would warp or adversely impress the plastic adolescent mind."

The conclusions this teacher reached on the sort of historical film desirable in school, conclusions based on his continued observation of the effect of the picture-house film on children, are set out in the next chapter.¹ In general, it would seem that what teachers have noticed of the effect of the picture-house film with an historical setting inclines them to feel that the accurately produced teaching film would be of value.

¹ *Infra*, 443 n.

CHAPTER XIII

THE TYPE OF FILM USEFUL IN SCHOOL

331. Scope of the Chapter. Is it possible from the results of the experiments to frame deductions as to the most desirable type of educational historical film? To do so, it will be necessary to examine critically each film in turn in relation to the results ensuing from its use. Certain common features in regard to the children's response to all the films must first be noticed. What sort of thing strikes the child when first he sees the film? What sort of thing is constantly recalled?

332. The Interest Tests in the Formal Experiments. The tests on the formal experiments included some such questions as, "What did you find interesting in the film?" It will be remembered that in these cases the reels were shown without comment, save for the one special test of the efficiency of a running oral commentary with the film. An analysis of the answers follows. It should be borne in mind that the answers refer to what interests the child, not to what he remembers. The results from all groups, children aged 10 to 13, were markedly similar.

333. Interest Test : "People of the Axe." In the film "People of the Axe" the visit of the pedlar receives the most frequent mention. Few children omit all reference to his visit. The episode receives emphasis on the screen. The pedlar knocks on the stockade, the villagers rush to let him in, all collect around, and chaffing proceeds amid bustle and excitement. Next favourite is the "barrow" scene, the juxtaposition of schoolboy and "skeleton" being responsible for this. Hunting and cooking attract interest, the latter as much from the boys as the girls. It was a boy of 12 who wrote: "And how they cooked their meat with no fat or lard." Reference to dress, houses, or the more commonplace occupations of herding sheep and scraping skins are infrequent.

334. Interest Test: "People of the Lake." In "People of the Lake" the most dramatic and humorous episodes connected with the Scout were seized upon. In every group but one, the reverence paid to the Scout by the Warrior upon the blowing of the whistle receives most comment, but many children also mention the dugout canoe in which Warrior and Scout paddled to the village, and the smith at work. Curiously enough, few mention the fight, in spite of the buzz of excitement that the scenes of the attack aroused.

335. Interest Test: "Roman Britain," Reel I. In Reel I. of the Roman Britain film the cornfield is frequently mentioned. Otherwise, the children notice the scenes connected with the illness and death of the Chief, the coronation of the new ruler, and also the druidical ceremonies round the altar. The human story moves the children, and apparently they are too young to feel distaste at the melodrama of the scenes.

336. Interest Test: "Roman Britain," Reel III. In Reel III. these things, given in order of most frequent reference, are mentioned: the quick step of the Roman soldier, the disregard of a soldier who falls out on the march, the Britons' war chariot, the contrast between armed Roman and wild Briton, the Celtic woman watching the battle, the Britons waving torches at the call to arms.

337. Conclusions. (1) Action is noticed: Need to exclude from the School Film non-essential Detail of Spectacular Effect. That is to say, the child, in looking at the screen, is attracted by action and primarily by spectacular action, as one might expect. Too much attention should not be paid to these results, for the children learned far more than they mentioned in answer to this particular test. Yet they emphasise the need for rigid exclusion from the school film of the non-essential detail of spectacular effect. The more spectacular, the more necessary the exclusion. The child is likely to remember longest what first attracts. For instance, one teacher, discussing a delayed test on "Roman Britain," writes: "Unimportant points, *e.g.* letting down hair for mourning, or the appearance of the dandy in the forum, are noted quite as often as the working of the drawbridge, and much more frequently than any other phase of town life." The child's interest must consequently be directed to essentials, not to foolish fops and posturing queens.

338. (2) Value of Artistic Settings: Need for Comment on Inanimate Objects. The interest in the cornfield was due largely to its aesthetic appeal; the value of the film from this point of view has already been noted.¹ The lack of remark on costume save in relation to the equipment of Romans and Britons in war is strange, since children constantly advance as an advantage of films that they show "the dress" of the different periods. Houses, buildings, are little mentioned. The interest of these things is subordinate to that of action. These results reinforce the conclusion already reached² on the present need for oral commentary on the static features of the film.

339. Delayed Tests: The Need for Unity in the School Film. "People of the Axe." The results of the delayed tests have brought into prominence the need for unity in the school film. An examination of the answers in the deferred tests of the formal experiments will make this clear. All groups, A to G, in recalling "People of the Axe," remember it as a day

¹ *Supra*, 238.

² *Supra*, 245-9.

in the life of the boy, Fleet. Although the barrow excited so much interest at first, few notice it some weeks later, nor do they recall the early scenes in the film, the men of the New Stone Age crossing the Channel and wandering on the hilltops. They tell of Fleet rising in the morning, his appearance and dress, his home, and then of some few of his activities; commonly, they write of his breakfast of shell-fish, bartering skins with the pedlar, his hunt, kill, feast, and the evening story. Those pictures of primitive life unconnected with Fleet, the making of pots and baskets, scraping skins, herding sheep, are far less often remembered.

340. Delayed Tests: "People of the Lake." The same features recur in the tests on the Bronze Age film. The point has already been made that in recalling "People of the Lake" interest centres in the activities of the Boy Scout,¹ something of a disadvantage when our primary concern is recall of Bronze Age life and its individual atmosphere. But the value of grouping incidents round a central figure again appears as in the first film, for the doings of Brown are vividly recalled in film sequence. Children recollect less frequently those scenes in which he was more or less a spectator, the pottery-making, spinning, and weaving. The smith is remembered, for the smithy scene with the smoking forge, the smith and his hammer, the firelight on shield, swords, and leaf-shaped spear-head, has specific interest of its own, especially for boys.

341. Children remember Detached Scenes as a Connected Narrative. **Delayed Tests: "Roman Britain," Reel I.** The results of the delayed tests in the formal experiments on Reel I. and Reel III. of "Roman Britain," when these reels were shown at different times, are illuminative on this point. In Reel I., the scenes are disconnected without any necessary sequence. Each is presented as an isolated representation of a typical scene in Britain in A.D. 43. The captions give no hint of continuity between the scenes, yet in a few instances such continuity exists, as in the successive scenes showing the interior of the Chief's hut, the women mourning, the Chieftainess assuming the crown.² Scholars seize on the connection despite the impersonal sub-titles. The youngest children, Sets A and B, aged 10+ to 11, and Set G, boys of 12+, who had the longest interval of seven months between film-showing and test, recall the film as the personal drama of the Chieftain's family. They turn these scenes into the story of a particular tribe. Selected items of the reel are given by the children on this pattern. The cornfield is described, then the village. This leads to mention of the Chief's house. The interior is described with some detail, everything turning on the illness of the Chief; the Chieftainess is sad as she spins; the minstrel plays a sorrowful tune. The children trace this story of the Chief to the coronation of his wife. They then take a mental leap to the Druid, who provides a link for another sequence, culminating in the wild religious celebrations in the forest. Where there is a thread between events it is followed. A few children

¹ *Supra*, 61.

² For detail, see *infra*, Appendix A, 9-10.

even connect the religious scenes with the story of the Chief. They become part of the mourning for his death, or part of the rejoicing over the coronation of the new ruler. One boy even imports from Reel III. the scene of the solitary rushing chariot (he must have been trying unconsciously to rationalise this purposeless incident) as the means by which the Chieftainess notified the surrounding villages of the coronation festival.

342. Scenes irrelevant to this Story are overlooked. The unfolding of this scheme includes reference to a certain amount of detail on homes, furniture, dress, manners, custom, government, religion, but the scenes which do not fit into this story tend to be overlooked. Basket-making and hunting are infrequently mentioned, for instance, because these scenes are isolated from the rest. Pottery-making is remembered rather more often, probably because it was shown in some detail on the film.

343. Tests of Older Groups on "Roman Britain," Reel I. The other Sets, C, D, and F, older than Sets A and B, and with not so long an interval as G, remember the film more completely. They are less concerned with the dramatic, remember better the occupations of the people. Group C, girls of 13+, forget little. But in every group the scenes connected with the Chief and the Druids receive most frequent mention, for they are not only spectacular but have continuity.

344. Delayed Tests: "Roman Britain," Reel III. Reel III. gives a series of typical scenes of the Roman and British army. In the same way, scholars remember it as the account of a particular march and battle, the story of a specific revolt and its suppression. Sets A and B remember the fight; the younger the children the more do the dramatic portions of the film stand out; but in describing the battle they give the equipment of each side. Few say anything of the march. These younger children, as well as the older, retain a vivid impression of the mad rush of the ill-armed British army hurling itself in vain against the Roman shield wall. The greater continuity in the scenes in this reel is reflected in the delayed essays of the older groups. Sets C, D, F, G tell the story of the film in film order and, on the whole, with surprisingly few omissions. The marks for Set C, girls aged 13+, and for Set G, boys aged 12 years 11 months, are high.¹ The boys of Set D do well; they would have scored higher marks if their method of writing had not been over-cryptic. In their anxiety to give a full account they resorted to short phrases, *e.g.* "I remember the shield, its shape, design, how carried." Such statements could not receive credit, though, taken in conjunction with the general standard of the essays, it is probable that they often indicated definite knowledge. The girls of Set F do relatively less well, since a few of the younger girls, as in Sets A and B, concentrated on the battle to the exclusion of the incidents of the march. Sets C, D, and G remember practically all of the reel, but, taking the sets as a whole, it is again the

¹ *Supra*, 89.

more spectacular incidents which are best retained. Few mention the camp, for no action of note occurred there, and surprisingly few the standard, in spite of its picturesque elevation at beginning and end of the reel—probably, again, because it is not connected with significant action. That is to say, in this reel, as in others, it is action that is remembered, and the children have been helped to remember by the continuity of the scenes.

345. Lack of Continuity leads to Confusion of Scenes and to Disjointed Memories. The danger in the lack of continuity in Reel I. and Reel II. of the Roman Britain film is apparent in the delayed exercises of the informal tests, where all the film was shown. Some teachers have expressed regret at the disconnected nature of their pupils' replies.¹ One, writing both of delayed tests on the Roman Britain and Nelson films, writes: "As most children saw one film only and no one saw more than two, I am surprised that there is not a greater difference between the standard gained in this test and in other history tests; I should have thought the unusual circumstances would have created a deeper impression. The unexpected announcement of the test in all cases produced consternation. In all classes the children declared they remembered nothing; but, when set quietly to work, all recollected so much that few had finished when the 40 minutes allowed had elapsed. Unfortunately, the disjointed nature of most answers proves that separate points were remembered rather than general connected impressions; the separate points are not always the most important. In writing of 'Roman Britain,' girls generally used 'they' without distinction as to whether Britons or Romans was meant; in some cases this is merely poor expression, in others definite confusion of fact, *e.g.* the feast and the litter are put down in the British part of the film; British chariot displays before battles are attributed to Romans." These girls were aged 12+. Other young children have confused the scenes of the two reels.² Disjointedness and confusion disappear when the film itself is an artistic whole. When many of the informal tests were taken, experience had shown the value of oral commentary on dress and so forth, so that finally these are remembered in addition to action; in one case a teacher notes that his boys had remembered more of these things than of the march and battle in the last reel.³

346. The Unity of the Wolfe and League Films ensures very full Recall. With the longer films, it is evident that the same principle applies. The formal tests showed that when the film was shown apart from oral teaching to scholars aged 10+ to 13 years 3 months, little was remembered beyond the incidents connected with Wolfe; the orally taught children remembered the same episodes.⁴ The informal tests show that when this film is accompanied by oral teaching, pupils of from 12+ upwards vividly

¹ *Supra*, 151.

² *Supra*, 186.

³ *Supra*, 148.

⁴ *Supra*, 72-3.

remember the whole story.¹ The definite argument running through the League film secures retention of its subject matter. Scholars of 13+ reproduce the argument and some detail after seven months.² Younger pupils of 11+ after six months have forgotten the detail, but remember some few episodes which are sufficient to keep in mind the general thesis of the film.³ A central figure is not necessary if unity is achieved in some other way. The Nelson film was not well remembered,⁴ only in one case was real success obtained,⁵ because it lacked this essential unity. That is to say, the delayed tests have clearly demonstrated that the school film must be an artistic whole. The more detailed criticisms passed by teachers on the individual films follow. It has been sufficiently shown in the preceding chapters that the teachers well appreciated certain excellent features in the films, that their use in general enriched the history teaching on their specific topics. The criticisms here dealt with are in the main destructive. From their consideration, in the light of results achieved, it is possible to formulate constructive suggestions as to the type of school film most likely to be of use.

347. Detailed Criticism of the Films : " People of the Axe." Absence of Dogmatic Assertion. For young pupils of 10 to 12 the conception of this film received little but commendation. One teacher, seeing it, exclaimed, " I 'm sure that 's the only way to teach the Stone Age," pointing out the skill with which it is suggested to the children through the excavation of the barrow that our knowledge of these times is based on archaeological research, and that little can be dogmatically asserted ; the Professor tells his story only as a probable tale.

348. Typical Reviews. These are two typical estimations of the film by teachers :—

(1) " The film was a great asset to the lesson but was not a lesson in itself. It brought to the children's knowledge facts that could not possibly have been obtained from good oral lessons illustrated with suitable pictures. It gave a very vivid picture of the men of the Stone Age, their dress, customs, and mode of living. On the other hand, the film would not have had much educational value without the preceding lesson, which grouped the matter into definite sections and gave the children an idea of the most important points to notice."

(2) **PEOPLE OF THE AXE.** " A film with a great appeal ; brought home to the boys something which it is difficult to achieve with the spoken word—a realistic picture of life as it would meet a boy in a day when there were none of the trappings, surroundings, and experiences such as boys associate with civilisation and life of their own day. It is difficult to give boys word pictures of the day when what they understand (implicitly) by ' civilisation ' was absent. This film undoubtedly brought home to them the conditions of life when were missing most of the common

¹ *Supra*, 134, 157, 160, 162, 163, 278-94.

² *Supra*, 136.

³ *Supra*, 138, 172, 174.

⁴ *Supra*, 141, 142, 295-8.

⁵ *Supra*, 300.

implements of everyday utility, and the ordinary assumptions of cause and effect. I feel that many boys lived the life of Fleet, and realised his difficulties, and stared with the same wonder or the same perplexity at the strangeness and newness (and mystery ?) of the emergencies which faced him. Concerning the scenes representing the discovery, choice, and sharpening of flints, the killing and the feasting, I heard many remarks such as 'Did they really do——?' 'My!' 'Did you see——?' 'I never thought of that.'"

349. Freshness of Actors: Length. The freshness of the youthful actors, in contrast with the artificial acting of some of the other films, received favourable comment. Teachers also commended the shortness of the film, in that it allowed time for discussion after its showing in the space of one lesson period.

350. Adverse Criticisms: Introduction of Modern People. On the other hand, it has been shown that children of 9 and younger are somewhat confused by the appearance of modern and ancient people in the same reel.¹ This point did not usually trouble children of 10+ and older, but one teacher whose pupils were aged 10+ writes: "The only criticism one could level in the case of these two films, 'People of the Axe' and 'People of the Lake,' was the introduction of modern people. To an adult, a master and pupils in the one and a Boy Scout taking part in the other, was distinctly annoying. One felt they had no business there, and to the children it may have been very confusing. In any case it might lead them to lose the idea of the tremendous length of time which has elapsed since there were lake dwellings in Britain."

351. A Reconstruction based on Inadequate Information. One teacher objected to the depiction of men of the Stone Age as altogether unkempt. Why presume that primitive man was dirty? One or two, while not objecting to historical films *per se*, deprecated the reconstruction of scenes of this time on the grounds of our insufficient knowledge of the period. Personally, if the subject is taught at all in school, I do not see the force of this objection. We tell the children about these times, show ample, ordinary illustrations, set scholars to make models of primitive tools, encourage them to form mental pictures. Why not, then, show a film? It can be made clear in oral lessons that our knowledge of the period is highly inferential. If the film is feared as giving a too clear-cut picture of the time, it were surely best to omit the subject from the syllabus completely.

352. Photography. The fairly numerous complaints regarding the dimness and the "crudity" of the film were generally withdrawn when the teachers realised that it was the first of a series of films produced by schoolboys as a school experiment.² The point is mentioned because

¹ *Supra*, 256-7, 260.

² *Infra*, Appendices A and B.

teachers are emphatic in declaring that, while the school film need not be in the nature of a super-film, "I do not believe that perfect production is necessary before films could be useful. An imperfect picture might convey much more to a child's mind than perfect words," yet in such matters as easy clearness to the eye it must be unimpeachable.

353. "People of the Lake": General Criticisms, Fugitive Scenes. The length of this film was also approved. Shown at natural pace, it takes about 20 minutes. It is open to the same criticism as the first, as a reconstruction of an imperfectly known period. Several teachers complained that the scenes showing the occupations of the people did not remain on the screen for sufficient length of time, that the spinning and weaving was unconvincing, and gave no proper understanding of the process. One teacher writes, for instance: "The film itself left little impression on my memory. The oral description of how spinning and weaving were done by the Bronze women, illustrated by working models, and the improvements in weapons, illustrated by diagrams, is still, however, clearly remembered. In the film you just saw these and quickly passed on without dwelling on any one thing for any length of time."

354. The Scout Motif: Pupils' Opinions. In general, criticism turned on the question as to whether the use of the Scout Motif was wise. Pupils who saw both the Stone Age and Bronze Age films generally preferred the latter.¹ The humorous incidents appealed, and the fight at the close. The children claimed that the presence of the Scout amongst the primitive people points the contrast between ancient and modern times. Yet children of 10 to 13 often did not realise the meaning of the episodes apparently intended to emphasise this contrast. The Warrior was merely frightened of the whistle; no idea of primitive man's superstitious terror of the unknown was conveyed. The Chief cut his finger with the Scout's knife, while the Scout with impunity ran his finger down the edge of a Bronze Age dagger. The class laughed at the Chief's chagrin, and enjoyed the Scout's remedial ministrations. By no means all realised of themselves the implications of the scene. "People often do cut themselves with knives if they play about with the blade," is their line of thought. Nor do they understand the scene where the Bronze Age child steals the Scout's book. Instead of the illiterate nature of the period, it conveyed to some children the reverse and wrong idea. They assumed that the boy could read since he troubled to purloin the book.

355. Teachers' Opinions on the Introduction of the Scout. One or two teachers agree with the children's opinion. "The introduction of the Scout was an admirable feature. It enabled the twentieth-century boy to throw himself more easily into the past, and on more than one occasion to witness the contrast in civilisation as represented by the people of the

¹ *Supra*, 132, 260, 267.

lake and the people of the present day." The majority of teachers dissent. One Headmaster considered that the comic element in the Scout's adventures was to be deplored in school, since there is too much cheap humour in the ordinary cinema; it rather degraded the educational film. Other comments are: "The setting of this film was no doubt justified if the film is intended solely for very young boys. The introduction of a modern Boy Scout among the Ancient Britons and the humorous incidents of the film were, to my mind, rather beyond the point." "If a story or film is to be the means of introducing some period, let it be a true historical story." "I think it incongruous to introduce the Boy Scout. The aim of the historical film should be to give as true a picture as possible. I think the sense of reality is weakened by the introduction of the twentieth century into the Bronze Age, and consequently the picture becomes rather a 'Once upon a time' story." One teacher sent the following interesting comparison between the two films on early man:—

"The film on the Stone Age was most instructive, and the boys grasped it and found much to confirm hazy ideas, and to give some constructive idea of the life of these far-off days—new ideas of 'settled life,' 'primitive man,' 'hunters and fishers,' that such men were 'real.' The film on the Bronze Age was equally instructive, but the raid of the hill-men is so realistic that it modifies the more pedestrian but more important episode when the Chief conducted the Scout round the encampment. The introduction of the Scout has its advantages in making contrasts vivid, but it has some disadvantages which the film did not qualify. The Chief changing hats and using the Scout knife with childish glee is apt to create in the juvenile mind a tendency to look down upon the folk of old time. The superior mind that finds in the past only inefficiency is to be combated. The transition from the rough-hewn flint to the polished flint was an achievement. The story of History is man's adjustment to, and often his conquest of, his environment. In whatever age man is to be found he must be dealt with sympathetically, his difficulties appreciated, his progress marked, and the debt of the present to his achievements recognised. But the presence of the Scout was well thought out, and the only point that I feel should be noted is that he should be relegated a little more to the background. The Chief should have been the central figure, and if the Scout could have been omitted from the fight the impression of the Bronze Age life would have been better balanced. The interest shown in the first film of the Stone Age proves that there is little need to import extraneous excitement, as in the Scout in the fighting episode, when he uses his own axe so theatrically. His behaviour elsewhere, except in the hat episode, was praiseworthy and useful in comparing notes of to-day with the past, dress, etc., and in the evident interest shown in his tour of inspection."

My own opinion, after assisting in several follow-up lessons with this film and marking 400 papers written on it, coincides with that of the teacher who wrote: "Avoid mixing the present and past for younger children, as the modern seems to hold the attention of the scholars."

356. The Roman Britain Film : Advantages. The film "Roman Britain" was shown to many more and to older classes than films *a* and *b*. In every case where it was used the teachers considered that their scholars had profited considerably. The teachers find admirable its arrangement in 15-minute reels, each with its separate but related theme, so that the film can be shown as a whole or in parts. Each reel, apart from the quality common to all pictorial films of bringing the period shown to life, has a peculiar advantage. The first reel shows that the Britons in A.D. 43 were not mere hairy huntsmen without knowledge of agriculture or of any industries, a false notion that seems to prevail widely. The picture of Roman and British town life in Reel II. helps to drive home the fact that the Roman occupation of Britain lasted between three and four hundred years, a fact children find difficult of realisation, since the pages devoted to it in their text-books are so few. Reel III. brings out well certain aspects of the Roman army. "The equipment of the Roman army was most convincing, no words could describe it so well, and to illustrate by pictures of the ordinary type the various formations and movements would be next door to impossible."

357. The Film lacks Unity. But the film fails to reach the teachers' standard of what a film on Roman Britain should be. One teacher concludes his criticism: "While the film undoubtedly achieved much more than the ordinary lantern, it fell far short of the standard expected of the cinematograph as an educational medium." Most appreciations were accompanied by considerable criticisms. The first are on those grounds of lack of unity which have already been shown seriously to affect the delayed results.¹ "In my opinion the film would have been far more valuable if a story had been built round it instead of there being shown so many apparently unconnected events and scenes." "It lacked the stimulus of a connecting narrative which would have doubled the value of the film." In this connection the irrelevance of many scenes must be noticed. The screen gives all episodes equal value. An important incident can only be marked by emphatic sub-title or length of treatment. A stupid dandy fills the centre of the screen as effectively as does the Roman Governor. A teacher may without loss, indeed with positive gain, develop a side-issue, make a humorous aside; he can immediately, in a phrase, readjust the balance between central theme and less important matters. The film has no such power of differentiation. Hence irrelevant scenes, distracting attention from the main sequence of events, should not appear.

358. Reel II. is obscure on Important Matters : (1) The Topography is not Clear. The lack of unity is allied to other faults, the most grave being a lack of clear historical perspective, especially with regard to Reel II. Essential matters are left entirely vague. Where does the Roman town lie geographically? The Roman occupation of the north

¹ *Supra*, 341-5.

was military ; the towns were forts, centres for barracks, women being excluded ; their settlements lay outside the gates. The occupation of the south-east was civil. Presumably the town in the film is in this quiet area, for many Roman women chat idly in the market-place. On the other hand, the drawbridge, in itself an excellent piece of reconstruction, is surely of the highly defensive type more appropriate to the castra of the north. One can only ask on what authority is such a drawbridge shown except in relation to a definite camp, and a drawbridge, too, that is raised by slaves at the wheel.

359. Lack of Clear Chronology. Further, what period of the Roman occupation is the reel supposed to represent ? The chronology throughout this film is confusing to an unwarrantable degree. Many teachers comment on this with disapproval. One writes : " No chronological setting was attempted." Another says : " When dates are given, a form of ribbon to give the time relation is useful. A date figure of itself is useless. The whole period of the Roman occupation could have been shown in this way." Even from pupils comes criticism : " There should have been more dates." In the first place, in the film the date A.D. 49 is used to mark the beginning of the Roman occupation. It were more suitable to give the usual date of A.D. 43.

360. Confusion of Period occurs. Later, the Governor receives a letter from the Emperor, Nero. Hence, apparently, the central reel purports to give a picture of life in Roman Britain in the mid first century, but again one queries whether at that date young Roman girls would be found wandering about the streets of Britain, as they do in the film, or such figures as the Roman dandy be seen. That would be more likely in the third or fourth century of Roman rule.

361. (3) False Ideas of Local Government are suggested. Again, what type of town is this, *colonia*, *municipium*, ancient tribal centre still administered by British magistrates ? The problem of local government is raised by the obscurity of the caption introducing the Governor. He can only be the Governor of Britain, yet children naturally assume that he is the Governor of the particular town shown on the film, and so get completely wrong ideas of local administration. Apparently, this town is not the Governor's headquarters, yet no particular reason appears for his presence there. The only plan to save a class from complete bewilderment and historical misconception is to stop the film and explain that this is the Governor of all Britain. He is here to take assizes or to put down rebellion in the district. Such enforced stops should not be necessary ; an educational film should be immediately clear in all its historical aspects. It was felt when first the film was acquired for use that it was open to this charge of obscurity, culpable in that it confuses the child on important aspects of the Roman occupation, topographical, chronological, and administrative. Since we were unwilling to criticise without fullest

justification, advice was sought. A scholar, distinguished for knowledge of this period, kindly saw Reel II. and Reel III. of the film. He confirmed the tentative view of the false impressions likely to be derived from the film on the above grounds, unless its showing was accompanied by careful oral explanation by the teacher. He called attention also to much peculiar detail in the film, which could not be accepted as true unless definite authority for its inclusion could be quoted.

362. There are Serious Omissions in Reel II. To these criticisms is added that of serious omissions in Reel II. "The film only gave the aggressive side of the Roman occupation of Britain, and almost nothing of the constructive, useful, civilising side." All teachers echo this complaint. I give examples of the criticisms received :—

(1) "A. Certain features of Roman civilisation were omitted :—

- (a) no view of a walled (stone) town ;
- (b) „ „ Roman road ;
- (c) „ „ „ house ;
- (d) „ „ „ theatre ;
- (e) „ „ „ baths (save massage scene).

B. No indication was given of —

- (a) the influence of Latin on the development of our national language ;
- (b) the influence of Roman law ;
- (c) the reasons for the departure of the Romans from Britain ;
- (d) the real details of Roman dress and military equipment.

C. Owing to the omissions noted above, the film does not convey an accurate picture. A child using even a good text-book and seeing this film would get a wrong impression."

(2) "The Romans were builders : but, apart from the hurried view of the drawbridge, the basilica, the baths, and the supper-room, their achievements in this direction were done faint justice. The British potter was shown at work, but Roman developments in this art were entirely omitted. There were no roads, no walls, no villas, no mines, no ships, and but one very obscure castra. These omissions were fundamental. The impression that the Romans were anything but soldiers and slave-drivers was not attempted. The economic exploitation of these islands was completely ignored. Apart from the gossiping dandy and his lady friends and the guests at supper, the only Romans shown were soldiers. Though an early caption drew attention to the attractiveness of the pre-Roman harvests, not a merchant, not a corn ship was shown."

(3) "The reel showing the Roman town was the weakest of the three. The pictures of the defences were good, but those of the interior of the town were so hurried that even an adult could get little idea of what life

in Roman Britain was like. A plan of a town would have been helpful. The exterior and interior of a Roman house, one or two mosaics, several rooms at the baths, methods of heating, could usefully have been shown. The making of the famous roads, bricks and cement, all interesting to children and important, were not included. It seems to me that these things are more important than some of the things shown."

(4) "I am sorry there were no diagrammatic maps in this film to show which parts of Britain were occupied by the Romans, to show where they built their roads and walls. A film showing the Romans at work doing this would have been valuable." Twice this last suggestion has been made by pupils. A girl of 15 said: "I should have liked to see the Romans doing something, making the roads." A boy of 14 wished that the film had shown the Romans building their camp, not just given a picture of one corner with the mound already raised.

363. Teachers' Suggestions for Diagrams to be included in Reel II. Several teachers felt that an occasional map or plan would have much increased the value of this reel on civil life. Amongst the most frequent suggestions occurred:—

- (1) An animated map showing the roads "shooting" across the country.
- (2) A map showing which parts of Britain were occupied by the Romans.
- (3) A map of the Roman Empire.
- (4) A plan of a Roman town.
- (5) A plan of a Roman camp.

364. Photographs of Existing Remains. Another common suggestion was that photographs of existing Roman remains in Britain might profitably be introduced. Such still pictures might be shown at the beginning or end of the reel without spoiling the illusion of reality in the reconstructed scenes.

365. Omissions in Reel I. and Reel III. Omissions in the first and third reels are occasionally noted. One teacher writes: "Much could be done to improve the subject matter of the film. The picture of the actual village was good, but more might have been made of the occupations of the people. The process of spinning was not explained, and it would have been helpful to see weaving. The smith, a very important person, was not shown." In Reel III., several teachers have regretted the omission of field engines, and the showing of but a small portion of the camp. The delayed tests showed that children aged from 10 to 13 did not understand this scene. Not having seen the camp in process of construction, and remembering the one corner shown, some imagine that a pit was dug to hold the tents, rather than that a mound was raised. Thus, they say, "The Romans made their camp in a deep hole," or "The soldiers kept

watch on top of the pit they made." These omissions in Reels I. and III. are relatively unimportant. Those in Reel II. are fundamental, since they leave a false impression of the period of Roman rule.

366. Reel II. gives a Wrong Impression of Roman Character. They are related to another criticism, that the film leaves the child with an erroneous notion of Roman character. Reel II. is definitely useful in that it shows the Romans otherwise than as soldiers and law-givers. Several times classes have made appreciative comment on this. Even the dandy has almost justified his existence, in that his introduction, which teachers rightly deplore, has led the children to realise that the Romans were very human people like ourselves and of varying temperaments. One girl of 15 opined after seeing the film, "The Romans seem more like us than the Victorians do." When asked to expand her statement, she explained, "The Victorians never gossiped, but those Roman ladies did." The village children of Experiments 62 to 65 were delighted at the new outlook on the Romans as ordinary folk, with homes. But, while it is a good thing to show the Romans as human, it is a pity to suggest that many of them were trivial. A boy of 14, for instance, presumes not unnaturally from the film that the Romans in Britain, when not fighting, "led very lazy lives," and that, in particular, "the women had nothing to do but stand about and talk." It were better that he should retain the old idea of a somewhat statuesque and unbending, but dignified Roman matron. General opinion is expressed by one teacher: "In the civil life section, it seems a pity that the picture the children get of a Roman who is not a soldier is the dandy, useful as he is in throwing new light on Roman character. And the triclinium scene, which would show excellently the Roman dining-room, is similarly spoiled. One wants to make the Romans live, and perhaps one should not conceal the foolish side of them, but it is a pity to make it so prominent without providing an antidote other than the soldier." The teachers object strongly to the banquet scene. It is obviously not a particularly respectable feast. No women are shown, for instance, with a high head-dress, the low coiffure being correct if all the women were flute girls, but only so. The Governor is present, but this could only be an unofficial revelry, yet the caption represents the feast as a normal occurrence, which is quite misleading to the child. One teacher writes: "Since ladies were not often invited to respectable feasts, is it desirable to show a banquet of the type portrayed on the film?" Later, she recounts her impression that her pupils gained a great deal from the film, and concludes: "This makes it all the more necessary that there should be a minimum of error. I should not like my girls to think that, as one of them says, 'the behaviour of the dandy showed you what Romans would be like at home,' or that Roman ladies habitually behaved in such a way at feasts!"

367. Reel II. is Incoherent. The general incoherence of the reel destroys much of the value of such useful scenes as do appear. One Head-

master said, "The scenes were too fugitive"; another teacher, "Different aspects of the subject were introduced without much evident plan"; a third, concerning the whole film, "The scenes were good and full of interest, but the film, as a whole, seemed to me seriously to lack coherence."

368. Reel I. does not re-create a Correct Atmosphere in all parts. The middle reel fails to create a true impression of Roman and British civil life and of Roman character. The atmosphere of parts of Reel I. is as unmistakably false. The Chieftainess with her languid airs is the absolute antithesis of a semi-savage ruler, capable of leading her tribe to war. The teachers complain, "The actors, or perhaps one should say actresses, were too obviously aiming at success as film stars rather than at reverting to inhabitants of Ancient Britain," and "The spinning in the Chief's hut was most unconvincing. Did the actress know how to spin?" Her behaviour in general was untrue to the character she was portraying. As a child asked in class, "Why was the Queen spinning and not taking any notice of her dying husband?"

369. Many Scenes throughout the Film are Unrealistic. In other respects the film is open to this charge of "stageyness," and the child, as has been already shown, is the first to criticise if ever likelihood has been sacrificed to the obtaining of stage effects. "The chariot seemed to be going on and on to no destination," says the boy of 12, instead of thrilling to speed of horse and flash of knives in the sun. Teachers severely criticise the battle scene. "The battle between the Romans and Britons was very stagey. The forces in each army were totally insufficient, and made the battle look like a skirmish. A battle in those days must have been far more fierce than that shown. Although the chariots were shown prior to the battle, they were not shown during the battle." "On the whole, the militaristic aspect of the picture was its success—but the battle would have been better omitted, for sham battles are rarely realistic. Whether the Britons fought in line and relay, as shown, is surely open to question." "The battle was most unconvincing; after all, Caesar often writes 'acriter pugnatum est,' and it took roughly 35 years to conquer the portion of Britain which corresponds to modern England." Probably this battle scene is not less realistic than many others shown upon the screen. A boy of 12 comments, "Wars should be more natural. There should not be so many dead on one side and so few on the other;" but, on the whole, representation of the battle appears to have value for children up to the age of 13+. The Senior Monitor of a Boys' Elementary School was one day helping to pack the apparatus. He was 14, just about to leave school, and had seen the Wolfe and Roman Britain films that day in the capacity of operator's assistant. I asked which film he preferred, and was surprised at the reply of "Roman Britain." "Why?" I asked. "It made it so clear why the Romans overcame the Britons. The Britons hadn't a chance." From his tone it was obvious that the inevitability of the conquest had for the first time really pene-

trated his understanding. To older pupils the battle is, of course, unconvincing and laughable.

370. Further Criticisms of Reel III.: The Armies. Other features of this reel are faulty. The Britons were expert smiths in A.D. 43. It is unlikely that their weapons were quite so ramshackle as they are represented. "The film hardly did justice to the Romans in the way of military discipline and soldierly bearing, and over-emphasised the barbaric features of early Britain. These are weaknesses which particularly strike boys who witness the film." The straggling nature of the column on the march is often criticised.¹

371. The Film presents Unusual Matters as Typical. A further objection to the film is that, while purporting to give a general picture of Celtic and Roman life, it uses untypical material. A child, reading the impersonal captions, and seeing such things as a Chieftainess ruling a tribe and calling them to war, must be forgiven for thinking that such conditions were common. And unless the Druids' altars were usually dome-topped, why choose to make one so in a film? Hundreds of children have written in the course of this enquiry, "The Britons made altars like toadstools," or, alternatively, "like mushrooms," and, in general, this was surely not the case.

372. Inaccuracies in the Film. Teachers and scholars noticed many inaccuracies. In addition to those already mentioned, many boys have remarked on the Britons' use of what were apparently well-groomed and highly-bred horses, "like a race-horse," not animals resembling the sturdy British ponies of the time. Children wonder why a Briton signals from the watch-tower of a Roman tower, consider that the British men were somewhat over-manicured. There seems to be no authority, literary or otherwise, for placing S.P.Q.R. on a standard of this period, neither is there literary or archaeological evidence for placing knives on the Britons' chariot wheels. The film errs in the last two particulars in common with many text-books, however. The Romans should not be shown as of far more strapping build than the Britons; the reverse was likely to be the case. The General mentioned in a sub-title should be correctly styled "Suetonius Paulinus," not given the one name. All sorts of detail raise queries. Would a Governor be likely to open a newly received letter from the Emperor in public in the basilica? Would the Governor's secretary also be his bathman? Was the Governor in the basilica attended with sufficient state? A teacher asks, "Would it usually be necessary to use fans at a feast in Britain?" The question has been raised what authority there is for—

- (1) The General to be shown marching at the *front* of his troops.
- (2) The litter to be given so high a roof.

¹ *Infra*, 473 (2, d), 485.

- (3) The particular type of inscription on the letter from the Emperor to the Governor ; it begins simply with the word Nero, an unusual style for documents of the kind.
- (4) The ceremonial on the reception of the Emperor's letter. It is decidedly reminiscent of that associated with the elevation of the host in the Roman Catholic Church.

373. Sub-Titles. Several teachers have regretted the length of one or two of the sub-titles, notably that introducing the Governor, and the use therein of words, such as *basilica*, unfamiliar to the child of 12+.

374. Summary of Criticisms. In short, the film lacks unity, coherence, and historical perspective. Its confusions and omissions are such as to create serious historical misconception in the children's minds unless preventive measures are promptly taken by the teacher. It is in many places avoidably artificial and theatrical. Its accuracy with regard both to historical atmosphere and concrete detail can be impugned. The censure it has received is in large measure complimentary. It is because it in some sort approaches the type of film that could be valuable, giving, as it does, pictures of social life that oral description cannot achieve, that the teachers are severe. The attitude is, "We can use this kind of film to advantage, but films conceived far more thoughtfully and produced in their detail with far more care."

375. An Educational Film cannot be successfully made from "Cuts" of Picture-House Films. The faults in the film seem largely due to the method of its assemblage. It consists of a series of cuts from a long feature film, "*Boadicea*." Only the scenes already in existence could be used. The result affords evidence that the true educational film cannot be made from a synthesis of cuts ; a purposive film cannot be created in this way. There is a fairly common notion that this can be done. Let holders of this view examine critically as many feature films with a historical setting as come their way for a year, as I have done, and they will find that such pieces of detail as are useful are often inextricably interwoven with inaccuracies, and that the historical element is so thin that little is left after its separation from romantic episodes irrelevant to the teacher's purpose. In this case of the *Roman Britain* film, the untypical scenes, the flagrant omissions, are due to the method of production. A criticism from a teacher who knew nothing of the production of the film illustrates this point. She writes :—

"This film seems to me thoroughly bad, *as a whole*, because it is so confused and confusing. In detail it is in many parts excellent. The general criticism that I feel inclined to make is that it seems to aim at two incompatible things : (1) Giving a general picture of Roman life in Britain and of British life under Roman dominion. (2) Giving some account of *Boudicca's* revolt. For instance, increase of taxation by tithing was not a normal part of Roman Imperial administration, and Nero's name is

actually mentioned, thus suggesting that the film is aiming at giving an account of Britain in Nero's reign. One naturally supposes that the rebellion led by a woman is that of Boudicca, and moreover a Chieftainess was not usual in British tribes. Yet, if it is an account of this particular revolt, one expects some geographical details, and one expects the Governor's name to be mentioned, and his expedition to Anglesey which gave Boudicca her opportunity to raise the country behind him. Another serious criticism of the basilica scene and Nero's demand for money is, that one is not told clearly that this is the Governor of Britain—he might be the Governor of the town, which is apparently *any* town, not the headquarters of the 'legatus Augusti propraetore.' It seems also to be a town in a yet unpacified region, to judge from its defences, and it is unlikely that the Governor would have his headquarters as civil head of the province there.

This is my main criticism of the film : I think that what is wanted is either a narrative, *e.g.* that of the rebellion of Boudicca, with as correct chronological detail as we possess in our sources ; and the campaign should in this case be made clear by maps, and the extent of Roman civilisation in Britain in A.D. 64, similarly indicated. In this case 'background,' camp, equipment, town life, etc., would all come in by the way, though a teacher could stress it as much as she chose.

If this is not aimed at, *merely* typical scenes should be given, and no names or actual historic facts that one can date, at least if they are as peculiar as the facts used in this film. The relative value of these two types of film is discussed briefly, later. My point just now is that, in the interest of clarity and truth, they should not be confused. Nor is it a criticism of this objection that children who have never read Tacitus and know nothing of Roman provincial administration would be less confused ; one wants the best in films, as one does in ordinary teaching."¹

376. Conclusion. The confusion of which this teacher complains obviously arises from the adaptation of the Boudicca feature film into a general school film of Roman and British life. This film, then, indicates that a school film must be an original first-hand creation. It also points to the need for collaboration between producer and teacher, that the teacher's viewpoint may be known, and, in view of inaccuracies, for minute and detailed criticism by historical experts before photography begins.

377. The Film "Wolfe and Montcalm." The Subjects filmed should be Typical of many Incidents. The use of this film raised several important general questions with regard to the type of film desirable in school. In the first place, the teachers' view of the value of this particular film depended entirely on the different ends they had in view in its use. Teachers of younger pupils, particularly teachers in the Elementary Schools, gave this film commendation. It treats of an episode with which

¹ In spite of this criticism, this teacher felt that her pupils had learned much from the film. See *infra*, 480-4.

they naturally deal at some length, and the film tells the tale more vividly than is possible by oral description. When the children meet the subject again in the Secondary School, their knowledge of the picturesque story is more or less taken for granted. The teacher refers only shortly to the episode. Hence, there are a few who feel that, even in the Middle School, "It involves considerable time for an episode which in the ordinary course can be dealt with only briefly." Showing the film is to them only a waste of time. Most of the teachers of older scholars who used the film considered it worth while, even with examination forms,¹ because the representation of this particular episode can stand as the type of battles of that period. We have seen that the surprised comments of the majority of scholars from 10 to 16 years of age, showed that it was needful for the contrast between warfare of the eighteenth and twentieth century to be pointed. The third group, then, considered that the film illumined the whole period of eighteenth-century history, in which much attention must necessarily be devoted to military and naval affairs. Two points emerge: first, that the value of a film, as of all educational instruments, depends largely on the teacher by whom it is used and the manner in which its potential benefits are exploited; and in the second place, that if a long film is devoted to one episode, not generally treated with Senior scholars at length, the episode must be typical in its setting of many other such events.

378. Realism in School Films. Discussion on this film has raised the question on the amount of realism possible in a school film. How far should life in its darker aspects be presented to children in the film? Several teachers refused to allow their pupils to see the Wolfe film, not because the fighting was horrible, but because it was not horrible enough. Several, whose classes saw it, criticised it adversely, because it did not sufficiently strip war of romance. They consider that if war is shown at all it must be shown in all its stark brutality. The danger of not doing so was illustrated by the case of one girl aged 12, who said, after seeing the Nelson film, that she was glad to have seen it because she had previously imagined naval battles to be dreadful, and now she saw that they were not so bad. She would like to see a film on the French Revolution, because that, too, might turn out to be not so terrible as she imagined. Realistic treatment of warfare is scarcely possible on the screen. Since the wisdom of showing the children the nearest possible approach to it is doubtful, and the danger of presenting glamorous battle pictures obvious, it would seem best in general to avoid militaristic subjects. This, I think, is the view of the majority of teachers. Their pupils, boys, would read this statement with annoyance. I asked a class of 60 boys aged 12+ what historical films they would recommend for making, and was answered with one roar of "Battles, Miss." Any lists given by pupils in response to such enquiries contain many names of fights. They make other suggestions, however, which are considered later.

¹ *Supra*, 278-94.

379. Criticism of the Battle Scenes in the Wolfe Film. This film, then, is criticised on the general grounds of the unsuitability of warfare for filming. "I do not approve of the fighting in such films being shown in such a picnic manner. A glamour is thrown over war—which does not exist. Those who have been in a war, particularly the last one, know that it is a horrible mess, and a senseless mess too. The League of Nations will not succeed until that point is brought home. Better tell a boy vividly what it is like to shovel up bits of your own pals into sand-bags than give him the idea that war is a glorious adventure." "Many of the scenes appear unrealistic and even unnatural, *e.g.* the interview between Pitt and Anson and the actual battle. The representation of the battle was a source of merriment rather than anything else." "The battle scenes tended to give a wrong idea of actual warfare. The general impression was something between a fancy dress parade and a 'Wild West' show." Boys of 16 were scathing in their criticism of these scenes, of "wooden soldiers," the infrequent casualties, and the like.¹ Younger boys, aged 12 to 15, are not excited to laughter at the battle, and girls in general are far less critical of this aspect of the film. One or two teachers did not consider the actual battle operations clear. "As a whole, the film would have gained in unity and coherence if long-distance views could have been shown of the Heights of Abraham and the battle, instead of these being shown in sections." "The military details were less clear—the masses were somewhat confusing." Most classes complain that it is not easy to distinguish English and French soldiers, for in each army both dark and light uniform is worn.² No doubt this is technically correct, but scholars are confused unless oral help is given.

380. The General Criticism was Favourable. If the impossibility of convincing battle representation was accepted, the criticism of the film as a whole was favourable. Teachers comment approvingly on the unity of the film, the "very clear thread throughout." It has been shown that this quality ensures the film's ready recall by scholars.³ Teachers appreciate the fact that Pitt is shown as organiser of victory. "I liked the planning of this story, particularly as it begins and ends with Pitt; this helps the teacher to show the importance of Pitt as the directing mind behind the adventure." The sword metaphor is considered helpful. "Pitt's description of himself, Anson, Saunders, and Wolfe as parts of the sword, crystallised the whole narrative—a very good teaching point." The story itself is graphically told. "This largely satisfied what may be required for a school film. It dealt broadly with a historical topic of first importance in a vivid and informative way, and contained the first essential—action." The maps were thought very useful, though the first was criticised for a somewhat vague indication of French territory, and the second as being "too much like the atlas." The maps showing the routes of the armies and the blotting in of English territory were generally found effective. Several teachers have commented on the fact that their

¹ *Supra*, 290.

² *Supra*, 279.

³ *Supra*, 346.

pupils could reproduce these maps after one brief showing, a feat impossible to them from the same time spent on an atlas.¹

381. The Film is too narrow in Scope : Other Military Operations and the Importance of Control of the Sea should be indicated. But many aspects of the film, apart from the battle scenes, received constant criticism. Teachers feel that, for all save the youngest children, the film was not sufficiently broad in conception. "The faults were that it took no account of any other simultaneous operations, of Amhurst's campaign, for instance." "The capture of Quebec stands out as too important. It would be better if its plan in the threefold attack could be hinted at." This criticism was almost universal. The work of the navy is not made sufficiently clear. "The first scene between Pitt and Anson was misleading, for it made it appear that the naval strategy had in view the capture of Quebec in 1759, whereas the plans were laid in 1757, and the capture of Quebec was only one step in the conquest of Canada." "The question of sea-power entered the story, but all mention of Lord Hawke's part in the matter was omitted." "The last part of the film showing the wait for the fleet is good. It corrects the majority of text-books. It is a pity that Quiberon Bay is not mentioned." Many point out that it is not at all evident that on the night of September 12th the fleet lay west of Quebec, and that the boats rowed downstream to the Foulon.

382. The Hostility of Montcalm and Vaudreuil is over-emphasised. Several teachers thought that in one matter, the relations of Montcalm and Vaudreuil, accuracy was sacrificed to dramatic effect. "The differences between Vaudreuil and Montcalm are over-emphasised, especially when one teaches that one advantage which the French held over the English colonies was unity of command. This, after all, is more generally true than the impression conveyed by the film. It illustrates the point that the film, unless extreme care is taken, is likely to sacrifice historic accuracy in an attempt to secure interest." "Is the quarrel between Montcalm and the Governor not stressed to the point of suggesting that *there* was the chief reason for the French failure, with a danger of obscuring the wider causes ? "

383. The Representation of actual Historical Figures. The use of this film has raised the further important issue as to whether real historical figures can fittingly be shown on the screen. Shall we keep our school films impersonal like the first three considered, or stage the national leaders operating amidst national crises ? The bearing of the question on this film is evident. A very poor delineation of Pitt is given. Teachers write : "Pitt is far removed from my conception of him as the great-hearted patriot and energetic War Minister." "The representation of Pitt is unsatisfactory—almost petty." Even pupils find the first scene between

¹ Cf. *supra*, 280.

Pitt and Anson unreal. The use of a model ship strikes them as ludicrous. The weaker children of 12 and 13 do not follow the dialogue, which is not clear, and so fail to appreciate Pitt's position. It is a pity that the weakness of this scene almost nullifies the advantage already noted, the attempt to emphasise Pitt's importance as the controlling force in the English campaign. Yet, though many children are at a loss over this first scene, it does not seem that the majority of children up to the age of 15 feel any lack in this portrayal of Pitt. Pitt generally remains a vague figure to children. He does not strike their imagination, being a man of thought rather than of action. He is more real to them after the film's unsatisfactory depiction than before. Children are not easily affronted by weak film presentations of great personages, for they think in terms of action rather than of personality, and certainly do not argue from feature to character like an adult.¹

Teachers have cavilled at the drawing of Pitt and of Wolfe in this film, like the teacher who says that "Wolfe is a morbid figure rather than a leader capable of firing his men with courage and enthusiasm." But, while it is proper that the teachers should insist on the importance of worthy representation of leading historical figures, it remains true that the film made these people more vital to the majority of children. Much attention was paid to this point in the follow-up lessons with children of all ages. The majority realise the direction of Pitt, and Wolfe appears thoughtful of others, magnanimous, a skilful leader. In judging a film, as in choosing a text-book, teachers should put themselves into the place of the child. After all, we do not use the children's text-books for our own edification or relaxation. Scholars of 15+ are approaching a maturer point of view; it is natural and right that they should criticise and find weaknesses in the film's character delineation. Most teachers feel that the film suffers in parts from over-sentimentality. "Several scenes might have been omitted without detriment to the film, *e.g.* Wolfe's handing over of his fiancée's locket to the Captain, and the death-bed scenes of Wolfe and Montcalm, which were not necessary to the success of the film." Discussing this point, I was one day reminded that the film is dealing with the mid-eighteenth century, when the people of these islands were not to outward view cold and self-contained; the strong, silent Englishman only came in with Wellington in the nineteenth century; the somewhat emotional representation of Wolfe is not, therefore, amiss. Regarding the other characters, Anson appears for too brief a space and plays so passive a part that he is not well remembered. It is a pity that his competence was not better underlined. A schoolboy of 14 writes: "It seemed that all Anson did was nod his head, but surely the leader of the navy would have had something to say on this matter," *i.e.* on plans for Canada. Few children learn Saunders, the blade, by name, unless this is given oral stress. Since a point is made of the sword metaphor, it is a weakness that Saunders in person does not appear.

¹ Cf. C. B. Firth, *The Learning of History*, p. 109; *Essays on the Teaching of History*, ed. Acton and Archbold, p. 82.

384. Minor Criticisms. Teachers have criticised several minor points. Though the film dispels the false notion of many children that the battle was fought on the cliffs immediately above the landing-place, the frequent appearances of the English on the march suggest that the field of battle was more distant than its actual position just over one mile eastward of the Foulon. Children confuse the scene in Pitt's study with the similar scene in Wolfe's cabin ; similarity of scene should be avoided in the school film. Pitt receives Anson, himself standing. Wolfe drinks from a very modern-looking water bottle. The portrayal of the " revival of the kilt " is commended, but several teachers wonder whether the Highlanders are given sufficient prominence.¹ The conversation of Pitt and Anson is not easy for children to follow.

385. Omissions. A few teachers regret the omission of certain picturesque happenings such as the recital of Gray's *Elegy*, perhaps better omitted in view of the controversy on the authenticity of the incident. Classes frequently remarked with regret that such familiar matters were not shown. One such opinion from a teacher is quoted : " The Montcalm film was to me a disappointment—what a lot of opportunities for real historical detail were wasted ! Incidents like the historical recital of Gray's *Elegy* during the advance, the challenging of the boats by a French sentry, with the Highlander's ready reply in French, the notable work done by the French nuns of Quebec in nursing the British wounded during the later siege—all these were omitted. For educational purposes it would have been well to postpone the release of this film until the makers could have procured and incorporated in it views of Wolfe's home, cenotaph, and monument from Westerham, England, and a view of the modern Plains of Abraham, with the Wolfe monument which stands on them to-day. The good points of the film were to my mind overshadowed by these and similar omissions."

386. The Film is too long. On the other hand, the majority of teachers find the film too long for practical use in English schools. It cannot be conveniently fitted into a 40 minutes' or even a 45 minutes' period, and films, however useful, cannot have a regular place in the schools if their use involves the upsetting of the usual time-table.

387. Summary. All the criticisms, to which full weight has been given, do not hinder a common opinion of the general attractiveness of the film and of its value for showing in school, chiefly to children of from 12+ to 15. From its length, it is best used after lessons with the 12+ groups, though in two cases successful results were obtained when it

¹ The criticisms received from masters of the use of high-explosive shells and the breach-loading musket, from boys of " cannon balls that burst," appear to be unfounded. The troops have the correct arms ; it is merely that one of the actors, from force of habit no doubt, goes through the motions attendant on firing the breach-loading musket of later use.

was taken as an introduction.¹ With children of this age it is of little value unless taken in conjunction with lessons, as the formal experiments showed. Average scholars of 14 and upwards grip the story from one showing; this was the case with Set H.² Used along with lessons with younger children, or taken by itself with others, it is well remembered from its unity, coherence, and vividly presented action.³ Its use has raised discussion of many general points :—

(1) Is there time in school for the detailed showing of one such incident? The answer seems to be

(a) Yes, with younger children, if the story is living, so that interest and imagination are aroused.

(b) No, with older pupils (13 to 15), unless the incident portrays features typical of many other episodes.

(2) Should scenes of warfare be filmed for school, since realistic battle scenes are both difficult to present and of doubtful wisdom? With this is connected a problem latent in all schemes of film reconstruction of history for children, *i.e.* how far may young pupils be acquainted with the harsher aspects of life.

(3) Should important historical personages be depicted?

(4) The teachers' criticism of some narrowness of conception, lack of realism, theatricality, and so forth in a film generally approved, indicates the standard they demand for the school film.

388. "Naval Warfare." The School Film should mainly present Scenes of Actual Life. In the making of this film, the function of the cinema in school has been misunderstood. Even those people teaching history with little love for the subject can adequately give an outline of events to their scholars and see the facts drilled home. On the other hand, the most enthusiastic teachers do not find it over-easy to clothe the skeleton of facts with flesh and blood, to feed the child's imagination with sufficient detail to enable him to make for himself accurate imaginative reconstructions of the past. This latter function the film can perform consummately well and with speed. The two reels of "Naval Warfare" practically ignore the possibilities peculiar to such a film of showing vividly life aboard in the Nelson epoch. The scenic element in the film, the element a teacher's descriptive powers cannot hope to rival, is reduced to a minimum, and the film resolves itself into a chronological summary taught by sub-title, maps, and diagrams, of naval events from 1782 to 1805. This the teacher could do equally well on the blackboard, better, for the class would participate all the time in the building-up of the summary, or in the drawing of the blackboard diagrams and maps. These they would remember for a period because of their participation, while the delayed tests show that children do not recall the diagrammatic matter of this film.⁴ Teachers, in electing to show their pupils this film, anticipated a representation of naval matters which would infuse real life into

¹ *Supra*, 133, 197.

³ *Supra*, 346, footnotes.

² *Supra*, 72.

⁴ *Ibid.*

the formidable lists of related facts that Senior classes studying this period must inevitably learn. Instead, they found another summary, and were correspondingly disappointed. A teacher whose class was divided between film and lesson groups writes: "So small was the pictorial element in the film that the test became rather a contrast of the relative value of sub-titles and summaries than of the relative value of pictorial and oral methods. It seems that the most suitable films are those which give pictures of social life, for here there is most difficulty in giving an adequately detailed background. In this case the film should show life in a sail-driven battleship, both on the quarter-deck and before the mast, methods of handling such ships in fair weather and in storm, the routine duties of blockade and the excitement of battle, and should not attempt to give a complete and connected account—by photographed words—of the wars of 1793-1805. This last is the teacher's duty." This gives the general case against the film.

389. Scholars' Views. The eleven tests with the film have been described in detail.¹ The scholars' criticisms were that the pictorial element was too small and scenes of life aboard too short. There were too many maps, so that none could be clearly remembered. The outline maps were helpful in their bareness of irrelevant detail, but their number caused confusion. The animated, shaded maps were splendid for the study of shifting alliances, if their shading had not been too near in tone for clarity. Similarly, the use of model ships for showing tactics might be an excellent device if only one battle was in question; when several conflicts were shown, confusion resulted; nor was it easy to distinguish the rival fleets. The film attempted to teach too much by diagrams not very clearly explained. One girl suggested that the depiction of one naval engagement would better have illumined the period for her.² Scholars did not complain of the personation of Nelson, save for his unnatural fall when shot on deck; his resource and bravery were made evident; but he appeared too little for them to learn anything of value about him. The film was disjointed.

390. Delayed Results. When delayed tests were taken results were far below normal,³ except in the one case of a class of Senior boys. Initial ideas, being hazy, naturally did not persist. The pictorial parts, for which children in their first answers generally expressed a preference, though the indication of routes was often approved, are the only scenes which remain clear.

391. Teachers' Reports. One teacher's views on the film have just been cited,⁴ and others have been given in the text.⁵ The remainder, short and given verbatim, have the same outlook:—

- (1) "The film contained too many maps and diagrams. The boys

¹ *Supra*, 107, 141-3, 172-4, 295-300.

² *Supra*, 298.

⁴ *Supra*, 388.

³ Cf. *supra*, 295, 297.

⁵ *Supra*, 143, 295-7.

lost interest. The maps were good, but they should not have been shown so frequently. The battle scenes with model ships explained Nelson's tactics clearly. I thought that the acting was very poor. The sailors moved like film supers, not like sailors. The actor who took the part of Nelson made him a ridiculous figure—simpering like a film actress."

(2) "This film seems to me to be valueless for teaching purposes.

(a) It was crowded with poor maps. Faint dotted lines kept appearing, marking in routes, etc. These could scarcely be seen.

(b) Too much was attempted.

(c) It was not at all thrilling or interesting.

(d) Nelson could have been left out for the good the children got. In the film he was not outstanding."

(3) "A poor and disappointing production, very disjointed, and the pictorial part most indiscriminately disposed throughout the film. The sham battles were very inadequately presented. It appeared as though the French fleet invariably stood stock-still and allowed Nelson to make rings round them. The actual diagrams showing the routes of the various expeditions and the coast lines blockaded by Nelson were good, especially that showing the fast frigate racing the French fleet home from the West Indies."

(4) "The maps and diagrams in this film were its best feature, the tactical movements of successive miniature model fleets leaving a sense of mechanical repetition and lack of action. The boy who proposed a vote of thanks put this in a sentence, 'he would have liked to see some fighting.'

Criticisms—

(a) The 'Nelson touch'—à la Rodney—could have been restricted to one of the battles in the way done.

(b) Napoleon (or any Frenchman) did not appear.

(c) The statement that Napoleon was making for Constantinople has no historical foundation. His letter to Citizen Tippoo in India and his own statements refute this.

(d) Generally speaking, although its mechanical aids were helpful, the film was unconvincing. It lacked action and a broad historical view; it was not free from inaccuracy, and confined itself too much to naval battle tactics."

(5) "Useful only as a revision film, not as an introduction to the subject. Children found the colours, black and grey, very confusing—black and hatched would have been much clearer. Much of the pictorial element (apart from the diagrammatic) seems rather purposeless. There is not enough of it to illustrate the points which, according to the text, it is supposed to illustrate, e.g. the mutiny of 1797. The diagrams showing the journey to the West Indies prior to the Battle of Trafalgar are useful; but the diagrams showing naval tactics did not help the children much. It was difficult to distinguish which were English and which were French

ships, and the children could not understand why the French ships stood apparently still and waited for the attack of the English. A little more written explanation on these points would help. I think a film based on Nelson would be more valuable. It would give a personal interest and unity to the whole, and at the same time would bring in all the important aspects of the naval war. It would justify the Nelson and mutiny part of the film which, as it stands, shows very little of either Nelson or the mutiny."

392. Reasons for the Film's Success in Experiment 99. With the boys of Experiment 99 successful results were obtained. The boys were of the right age for the film and knew the subject well beforehand, but these conditions also obtained in Experiments 12 and 94 to 97. Possibly something may be due to the fact that this experiment took place near the end of the enquiry. Everything which had been noted in other cases as confusing, in this instance received oral explanation. This full verbal description and repeated stops helped to carry the film through. Further, the other Senior classes, save in the case of the mixed group of Experiment 95, were of girls. Boys are more interested in naval affairs, and far more intrigued than classes of girls with the ingenuity of the mechanical devices of the film. The girls were more concerned with pure history. The boys, in recalling the mechanical contrivances which had interested them, remembered the subject matter. Their master reports more favourably on the film : " This film was well liked by both forms. The scenes of life on board ships of the time were interesting, but rather distracted attention from the diagrammatic part. The latter showed that there are great possibilities in this type of film for furthering serious history. One felt that opportunities were missed in this particular film ; the strategic position of Gibraltar commanding the entrance to the Mediterranean and standing between the chief, French naval bases could, and I think should, have been shown : also the prime importance of bases in naval warfare (and for that matter maritime command) might have been indicated without overloading the film, for the British gains in 1815 show how conscious of this was British policy. The relation of the sites of naval battles to the political situation was, however, well shown ; and the progress of events leading up to Trafalgar was admirably clear and conveyed a lasting impression."

393. Comparison of Wolfe and Nelson Films by a School Certificate Class. A mixed School Certificate Class who saw both the Wolfe and Nelson films were asked to compare the two. All preferred the Wolfe film. A résumé of their opinions follows : " The Wolfe film told a clear continuous story, Nelson was ' choppy.' " " In the Wolfe film the story was seen in picture form from beginning to end ; in the Nelson film the pictures were few." There were too few scenes in " Naval Warfare " of life in the navy. " There ought to have been close-up views of the fighting. There was not a single view of a British ship from a French ship

or vice versa." " Pictures are far more interesting than maps or diagrams, and in the Nelson film maps and routes were shown more than actual warfare." " The map of Europe was shown so many times as to make one thoroughly fed up at the sight of it." Most of the Nelson film consisted of " maps and words," but even so there was not sufficient explanation to make the development clear. The model ships were interesting for tactics, but Nelson's plans were not shown in detail like those of Wolfe, nor were other people co-operating in the struggle shown, as in the Quebec film. " No organiser was shown like Pitt. Things seemed carried out at random." The Wolfe film showed the leaders and plans of the enemy. Nothing of this was pictured in the Nelson film. " It was too short, more like a series of slides than a film." Its ending was abrupt. These views coincide with the opinion of most other students on the film.

394. Conclusion. Use of this film appears to have established that in general :—

- (1) Confusion is caused by attempting to summarise a big topic in two short reels. A more useful supplement to oral teaching can be provided by the detailed, pictorial treatment of selected items within the topic.
- (2) Films should give scenes showing life in movement rather than diagrams. Teachers can produce diagrams tolerably well on charts and blackboard. Their descriptive powers cannot compete with those of the film.
- (3) Shaded, animated maps are useful for showing the growth of alliances, but their colour treatment should be bold.
- (4) Animated maps are clear, since only a few essential points are shown, but such maps and moving diagrams are not generally remembered if many are shown on one film.

395. " The World War and After." Tests with this film have emphasised many points, two of special interest, first, more than any of the other films, the need for co-operation of film and lessons, so that the final result is better than could be gained by either visual or oral means alone ; secondly, and in this the film has performed a special function in the enquiry, the film has been a standing witness that the cinema can fittingly deal with thought and motive as well as with action. Consideration of detailed criticisms and results will make the second contention plain ; the first has already been dealt with.¹

396. Weaknesses in the Film. The film has patent weaknesses as a classroom film, due largely to the fact that it was produced primarily for mass showings to large audiences, and this not only in school, but for such occasions as Saturday morning showings in a local cinema for all the school children of the district. Consequently, it needed to be fairly long, for organisers of such shows could not collect the children for much less a

¹ *Supra*, 327.

period than an hour, and to cater for many tastes and ages. The fact that it is well adapted for such purposes is the very cause of its defects as a classroom film. It is too long, both for the practical reasons of time-table already discussed and for the learning of all its detail, save by the Senior pupils of a Secondary School. A teacher writes, for instance, "Undoubtedly a tremendous help, but too long; it would require a disproportionate amount of time for practical purposes." Further, its mingling of pictorial and diagrammatic matter makes it admirable for showing to a whole school; all ages of scholars will find something that appeals; but it is not specifically suitable for detailed study by pupils of any given age. Thus, teachers of older scholars, and older scholars themselves, complain that the simple examples from daily life illustrative of political affairs are given at too great a length. Teachers of young pupils think that the film contains too many and too difficult diagrams and maps. A further and less to be expected difficulty comes to light when we find that many of these younger pupils miss the point of those "parables" included for their special delight and edification—the street fight, the garden dispute, John Bull. Young children enjoy them, remember them better than the rest of the film, but do not in many cases understand them. This is true of many children of $12 +$ ¹ and of the duller children of $13 +$.² Details of the children's failure in comprehension of these analogies have been given in the accounts of the particular experiments. This finding tallies with results for tests on the understanding of fables set forth in Terman's exposition of the Binet-Simon tests in his *Measurement of Intelligence*. In one test children of 12 are told five fables and asked to say what lesson each one teaches. They score 2 if they interpret the fable correctly and state its lesson in general terms; they score 1 if the interpretations stated in general terms are fairly plausible but not exactly correct, or if the interpretation is perfectly correct as to substance but not generalised. A child of 12 is considered to have passed this test, to be of normal intelligence for that age, if he scores 4 marks out of the possible 10; that is, he is only expected to interpret two out of five fables correctly, or to have one correct and two answers deserving half credit.³ The "average adult," that is a person of 16 or older, should score 8 marks.⁴ Teachers make much use of such simple examples in oral teaching, but it has already been pointed out that they carefully distinguish between the real and the fictitious event.⁵ The film cannot with the same ease differentiate. The weaker brethren among the scholars accordingly take the illustration as an actual event, and confusion follows. It is possible that oral comment might make the matter plain. One teacher suggests stopping the film for explanation of the analogy.⁶ It seems to me that if this is necessary these illustrative examples are a clumsy expedient, better omitted.

¹ *E.g. supra*, 137.

² *E.g. supra*, 177.

³ L. M. Terman, *The Measurement of Intelligence*, p. 290.

⁴ *Ibid.*, 324, *Record Booklet for the Stanford Revision of the Binet-Simon Tests*, p. 9.

⁵ *Supra*, 137.

⁶ *Supra*, 304.

397. The Film's Field of Use is Limited : (1) Survey of Tests in Schools in Poor Districts. These defects limit the film's field of use. Whereas given results seem to show that a picture film can be shown with advantage to children of all ages and abilities from 11+ to 15+, this film is too difficult for the comprehension of the slower children of 13+ and 14+. A brief survey of results will make plain this narrowing of the field. Take, first, experiments with children from poor districts in the towns. In Experiment 56, with a Senior mixed class, though the essays of the children reached average standard, and showed fair grip of the essential features of the film, the class teacher did not consider that this type of film was nearly so helpful to her scholars as the more purely pictorial type. The class had not enjoyed the film ; it was, in their words, " too difficult," " too political." The teacher felt that the Wolfe film, also seen by these children, did far more to help the children look on history as a living subject. In Experiment 54, with Senior boys, the masters felt much the same. The boys had learned a good deal from the film, but they had not enjoyed the lesson. The length and impossibility of learning many of its parts, *e.g.* the constitution of the League, the maps of the new countries, wearied the boys. The teachers considered this serious, for in such schools a big function of the film is to increase interest. The Headmaster thought the film admirable in itself, but not the best type for his school. The Standard VII. master thought the first part of the film far too harrowing for children. He especially deprecated its showing in schools where the children were poor. His boys came up early against the hardship of life ; it was a pity to introduce them to vicarious misery. This is again the point as to how much realism should be allowed in the school film. The Standard VI. master, perhaps influenced by seeing the film from the point of view of the children, found the film boring. He writes : " Like all propaganda—boring. Though I am a strong supporter of the League of Nations idea and think war should be abolished, I was so bored that I would have been delighted to see the Bulgarian and Greek sentries set about each other as a diversion. The little links in the chain arranging themselves were more interesting than the facts they represented. The John Bull postman scene was far too long—and very badly acted."

The Senior classes of the corresponding Girls' School saw the first three reels of the film (Experiment 55). The Headmistress, who afterwards discussed the film with the girls, thought the Upper class had liked and grasped the film ; their exercises bear out this view. It was, however, beyond the capacity of Standard VI. In Experiment 57, an average class of Senior girls aged 13+ responded well in the film's follow-up lesson, but a class of slower girls of the same age had gathered little ; both had had a short previous lesson on the film.

398. Survey of Tests in the Average Elementary School. In the average Elementary School, Senior scholars proved both interested and able to grip the film.¹ In one case the Headmaster disapproved of the

¹ *Supra*, 136-40.

film. "The League of Nations film seemed to me much too artificial and got up for the occasion," and the History teacher criticised "the non-historical character of John Bull, and the fact that much of the material could as easily, and perhaps with more effect, have been presented on a blackboard or by means of still pictures." He continues: "Further, it is probably true to say that, except for the Secondary School boy or girl of 15 or 16 years or so, the meaning of most of the phrases and quotations, and the significance of the maps, would be lost. I feel sure our boys did not grasp many of the details and much of the meaning. The maps, *e.g.* the blackening of the portions marking the newly entering combatants, and the pieces rearranging themselves into the new boundaries, were certainly highly effective to the adult mind and to some of the boys, and such tricks as the showing of tables and chairs on the occasion of the settlement of disputes. But, personally, I doubt very much whether these would be treated by the boys as part of the whole, or as more than pleasing little film tricks, to be noted with delight and then to pass on." However, his boys aged 12+, and another class aged 11+, showed by their papers that they had both understood and learned the greater part of the film material, though the full meaning of the analogies eludes them.¹ All the other teachers concerned felt that, though the film certainly made demands on their scholars, that was all to the good. It was within the scope of the Senior classes and was an attractive method of approach to a subject unavoidably difficult, if not dry, when handled orally with girls and boys aged 13 to 14. Most teachers in Elementary Schools, however, felt that films giving far fewer diagrams and presenting chiefly scenes of actual life were better suited for general purposes for even their Senior scholars.

399. The Film with Classes over 14 years of age. In the Secondary Schools, the film was generally shown to the Upper half of the school or to the branch of the League of Nations Union.² It is perhaps unfortunate that in the only two Boys' Secondary Schools where it was shown, it was given out of school hours to such a society, and no testing of the boys was possible. The masters in charge of the branch at each school give severe strictures on the film, the point of view in each case being that the film is by no means a sufficient antidote to the natural glamour war holds for the boy. Their criticisms relate to the film as a means of teaching the aims and methods of the League. One teacher writes: "The general impression was that the film was too orthodox: the points made were not challenging enough; I felt that the audience did not go away angry or pleased or even with large question marks on their minds. In the diagrams, I think more use should be made of the grotesque; for example, the dancing about of the links of the chain of peace, and other quaintnesses might be increased: the result would be to increase the amusement and interest of adolescents. The close-ups of Geneva could well be greatly reduced in number. As regards the actual war scenes, more could be

¹ *Supra*, 137, 138.

² *Supra*, 108, 302-10.

made of the horrors, the actual trench life, the attack. If possible, actual death might be shown, but, if death, it should be shown on both sides, German and English. Some people deprecate horrors : if a proper idea of war is to be given, then it must be shown in reality, stark naked, not wrapped up. Nobody can talk or think about war unless they know what it is : for example, the phrase 'he was blown to bits' means nothing practically, except to those who have seen it. It is ridiculous to expect a generation to hate war if it doesn't know what it is. I think also that the great problems of disarmament might be dealt with. First, the insanity of the naval situation might be brought out : it could be shown how capital ships only balance other capital ships, and if they were all wiped out (by some Felix the Cat method possibly), that the resultant position would be the same. Also, on land, the idea of enormous land forces all trained for *defence only* might well be ridiculed by some cartoon system, and the idea of armaments for police work only would very fittingly make a finale."

I would say, in considering this criticism, that I do not know how the film affects older boys, but boys of from 12 to 15 leave the film, if not angry or pleased, yet certainly thoughtful, and convinced of the futility and criminality of war. The film, for instance, was shown with good results to boys aged 15+ in a London Central School. The boys were interested, the chief value in the film in this case seeming to be the conveying of the notion that the League was something very actual and definite, to be taken into account, a body that achieved results.¹ A representation of the unhappy results of war may fall far short of the reality and yet be sufficient to arouse conviction of its wrong. Here, again, is the question of the amount of realism possible in a school film.

400. Films need not deal only with Superficialities nor be purely Episodic. The second criticism runs : "As the League of Nations Union is an 'out-of-school' activity, membership is open to Forms Upper Four to Upper Six, ages 14 to 18, and of very varied intellectual ability, criticisms from the point of view of response would be valueless. My own criticism, probably equally valueless, would touch on subject matter, which, in the absence of a previous interest in the subject, did not strike me as particularly interesting, and on form, in that, while maps and diagrams are necessary for the scientific interest of an interested adult, they have not the same appeal for the boy. Besides, I am not sure the film is a desirable adjunct to education in this particular sphere. In nature study and descriptive geography it must be invaluable. In history, *e.g.* it does not appeal as, say, the Aldershot Tattoo, though its function here may be developed as experience is gained, but peace is, or ought to be, an appeal to the reason, and the film seems to me to have as much place here as in a discussion of the equation $e^{i\pi} = -1$.

The views of the cemeteries and the countless crosses, representing spots 'that will be for ever England' (why not quote the line as a sub-

¹ *Supra*, 302.

title in the film ?), strike me as the most impressive. In general the film appeals to the converted." The relative value of maps and diagrams and pictorial matter is discussed later. It is questionable how far the remark anent the mathematical equation is meant to be taken seriously, but it opens the way for consideration of a very general and, I think, wrong attitude to films, as being a medium capable of dealing only with the lighter side of history. That the film in general has power to appeal to the reason is amply demonstrated by the results gained from the use of this particular film. The film was well tested with older scholars in eight Girls' Secondary Schools. In every case the film roused real interest and discussion. The success of this film in awakening serious thought on fundamental issues is one of the most important aspects of the enquiry, since it rebuts such criticisms as that under consideration and the allied view that the film can only deal with the more superficial aspects of history, customs, dress, dramatic incidents, the actions of men as apart from underlying motives. A concatenation of events in human affairs, subtly linked together in an endless ramification of cause and effect, can be given a unity and coherence for children through the film medium that it is difficult to achieve in words. Orally, all the connections are difficult to grasp, the tale is so long in the telling. Cause, result, and the result of result, jealousy, war, the collapse of European civilisation, the need for the League and its inception, are shown in their relation in the League film. The method is capable of infinite expansion. The film need not be purely episodic in the narrowest sense of the word. I can imagine, for instance, a film on the Peasants' Revolt, showing not merely certain picturesque events of the rising but the condition of affairs in various parts of the country, suggestions of one contributive cause after another, bringing about the seething discontent which underlay the final upheaval. Many of the criticisms applied at present to the use of films are true only of films as they chiefly are, not at all of films as they might be. "The World War and After," at least, shows that the cinema is an appropriate medium for the effective presentation of relationships of cause and effect, and, beyond the teaching of concrete detail, a medium for the indication of ideas which have been far-reaching, like those lying behind the inauguration of the League.

401. School Report in Support of this View. The following report is given in support of the contention that the film can, since this film does, deal with a sequence of events united in causal relationship and can successfully make an appeal to the reason. The results of written tests confirmed the views expressed in the report. Scholars of 14 grasped the film argument and retained three months later a definite impression.¹ "This film was shown to the School Branch of the League of Nations Union. Amongst the large audience of nearly two hundred were members of Staff and girls from Forms VI., V., and IV. Every one expressed delight at the end of one of the most impressive and instructive films that we have

¹ *Supra*, 305.

ever seen. I feel that both the youngest and oldest members of the company found the film equally enjoyable and helpful. Why? Firstly, there was such variety of scene, incident, and action that every one's interest was sustained throughout the hour, which seemed but five minutes. The first series of pictures showing the causes and horrors and extensiveness of the Great World War—1914-18—were most impressive. Every one must have felt the impossibility of another war. The next series of pictures showing the drafting of the treaty and the organisation of the League of Nations illustrated aptly not only the difficulties of re-arranging the boundaries of Europe but the inevitability of future discontent. Thereupon followed naturally the need for a League of Nations to avert future trouble. From this the interest was aroused in the machinery set up and its methods of working—and its cheapness set against the burden of warfare. Every one was impressed by the appearance of millions of pounds in figures. Finally, and what I consider to be the keystone, so to speak, of the film, we were shown two actual disputes in process of settlement. The children will not be likely to forget the scene on the Bulgar-Greek frontier during the forty-eight hours preceding the expiration of the ultimatum, nor will they ever forget the marvellous speed with which the officials of the League hurried to Paris by air and rail to avert war. The common sense in resorting to arbitration rather than to fighting was most simply and vividly expressed in the scene of the quarrel of two gardeners about their boundary line. I have much pleasure in expressing the gratitude of all the Staff and girls present to the film. It has made the need for and work of the League of Nations very clear, and has been a means of recruiting new members."

The teachers in the eight remaining Secondary Schools expressed their opinion that the film was helpful, though its subject matter proved beyond the capacity of the backward girls of 13+ and 14 in Experiment 15.¹ It has, then, been shown to be of use in the Upper classes of the average Elementary School, and in the Secondary School. It remains to consider in more detail the various sections of the film.

402. The Maps. Children of 12 to 14, and many of 15, preferred the pictorial parts of the film. Older girls preferred the maps and diagrams, as did the boys aged 15+ of Experiment 100, but even older pupils rarely learned the detail of the maps. In the delayed test, the maps were little referred to, except that blotting in the countries at war. This again seems to indicate that the animated map is not remembered if several are shown at once. Moreover, the children were not content with the general impression they received. The teacher can appreciate the importance of an impression of vastness and so forth being achieved. The pupil is conscious of the presentation of much matter which he has not fully realised. A series of follow-up lessons would use that desire for more precise knowledge to fix the subject matter in oral lessons. To take such a series was not possible during the enquiry, but it was very evident in the one discussion

¹ *Supra*, 108.

lesson which several times followed the film, that the desire to give exactness to the knowledge glimpsed was there; the film has fulfilled its function in rousing interest. The necessity for accompanying lessons has already been fully discussed.

403. The Pictorial Parts of the Film other than the Analogies. On the whole, this was exceedingly well remembered. One or two sections needed follow-up lessons to fix the detail. Most scholars, for instance, find the section dealing with the organisation of the League both difficult and dull. The pictures are uninteresting, as the features of the statesmen are rarely distinguishable. The picture of one conclave is very much like that of another; thus these scenes do not help to differentiate the various committees. This part of the film lacks action. It is not clearly remembered. But it has been noticed that the children retain a feeling that there are many folk participating in the work of the League, and they refer in their delayed tests to the League buildings. The undeniably dull pictures of this section help to make the child's idea of the League less visionary. Several teachers have suggested that a written table of the five, chief organs of the League should be flashed on the screen, and the scenes themselves cut out. Figures are rarely remembered with accuracy. This is the case however they are taught, but the film leaves girls of 14 completely perplexed as to the League's methods of obtaining and expending supplies. They realise, however, the gigantic cost of war and the comparative inexpensiveness of the League—the impression desired. For more, lessons are needed.

404. Minor Criticisms: (a) The Causes of War. Though there was general and strong agreement amongst the teachers on the value of the film for average scholars of 13+ and upwards, many other minor criticisms were made. The most serious were in connection with the opening scenes on the causes of the war in 1914. Practically every teacher who saw the film complained that its summary, "One blow may start a street fight," and the street fight followed by the caption, "One murder may start a world war," and an account of the Serajevo incident, gave the impression that the murder was the real cause of the war, not merely the excuse. The difficulty was usually met during the enquiry by a brief 5 minutes' talk on the origin of the war, but the film should not need to rely on oral help in such an important matter. The film was revised while the enquiry was in progress, and new scenes inserted to suggest the national jealousy which lay behind the readiness to take up arms. The caption, "When neighbours are quarrelsome," preceded scenes of wrangling neighbours, placed before the street fight. Additional sub-titles, "When nations are unfriendly one murder may start a world war" and "In 1914, when armies and navies were bigger than ever before, the heir to the Austrian throne was murdered," carried over the lesson into the sphere of European politics.¹ It was not possible to use the revised

¹ For fuller details see *infra*, Appendix A, 26.

version in many schools, but a certain number of teachers saw the new matter apart from their scholars. The Headmasters of three Elementary Schools thought the new opening satisfactory for their pupils. The following opinion represents that of the greater number of teachers who saw the film. "The new opening provides a very poor analogy in the scenes showing the quarrelling women and the greedy child.¹ They afford no help to the understanding of the general circumstances leading to the European conflict. The original opening 'the blow' was not satisfactory by itself; there ought to be some introduction to show why one murder led to war, but the method used is very unsatisfactory." One teacher asked Fourth and Fifth Forms what they felt about these introductory scenes, and found that none of them had really understood their force. Another mistress enquired of girls aged 12 to 18, and thought most of them had certainly been helped by these scenes.

405. (b) **The Garden Dispute.** The garden dispute is occasionally criticised as so great a simplification of the settlement of frontier disputes as to be misleading. Most teachers do not agree. Matters must be simplified for children, and this particular garden settlement does not seem to pupils cursorily despatched. A teacher writes, for instance, "I think the incident of the quarrel about the boundary lines was good.

- (1) A real difficulty was obvious.
- (2) There was settlement by agreement with help from outside.
- (3) It was settled by a 'scientific' method (the area of the gardens was found by measurement). Also, I thought that it was an interesting point that the actual dividing line did not come exactly where it might have been expected."

406. (c) **Miscellaneous.** Another criticism is that in the first reel there is little difference between the state of Poland before and after the war. Some children feel that the effect of reality is spoiled by the introduction of still pictures, but it is noticeable in the essays that the still picture of "Soldiers blinded by Poison Gas" creates a deep impression. Everybody is irritated by the recurrence of the same picture of Geneva. "The picture was almost perfect," writes a girl of 13+, and continues, "In fact, the only thing I have against it is that I do not consider it necessary to learn the picture which showed the clump of trees representing Geneva off by heart." Some teachers criticise the showing of scenes in the Aaland Islands, and of views of the cities visited by the delegates, as side issues, but the majority of teachers consider these one of the most interesting aspects of the film, as an indication of how the film can lessen the severance in the child mind between the closely allied subjects of History and Geography. One teacher writes: "It is helpful to have a view of Paris, London, Stockholm, etc., when these places are mentioned; it makes the child realise that they are not merely names." The views of the Aaland Islanders at work are, of course, necessary to suggest their prosperity, the reason for the covetousness of Sweden and

¹ These scenes do not appear in the latest revised version of this film.

Finland. A brief question or two leads most classes to see the connection, even if it has not been initially perceived. Most teachers of Senior scholars think the last two reels dealing in detail with the settlement of disputes the most effective and useful part of the film. Many adults, myself included, "muddle a.m. and p.m." in the showing of the last dispute, but children do not appear to be similarly confused. Girls frequently ask, however, whether it was a Bulgarian or Greek sentry that was killed, Bulgaria or Greece that began hostilities and crossed the enemy frontier. The film is not clear on these points.

407. Conclusions drawn from Use of the League Film. The use of this film has called attention to the following points :—

- (1) The school film must be short.
- (2) The clear development of an argument is sufficient to give unity to a film. Such an argument is grasped and reproduced in its essential sequence by average children of 11+ and upwards.
- (3) Children up to the age of 13+ do not readily understand analogies presented on the screen. Fact and fiction are confused.
- (4) Confusion arises from similarity of scene, cf. the Wolfe film. In the League film deficiency of action may also explain lack of memory of certain scenes.
- (5) As in the Wolfe and Nelson films, the question has been raised as to how far school films should be realistic in their presentation of the dark side of human existence.
- (6) As in the Nelson film, animated maps are not remembered if many are shown at once, except particularly bold maps of the blotting-out type. Other animated maps are permanently useful only if employed in conjunction with closer study of similar, still maps in the atlas or on the blackboard.
- (7) In the Elementary School, the film needs to be in general pictorial in form, *i.e.* to deal mainly with scenes of actual life.
- (8) As in the case of Experiment 99, where the Naval Warfare film was used with Senior boys, the use of this film suggests that there is definite scope in the Senior forms of Secondary Schools for the diagrammatic type of film, as an introduction to, or summary of, more precise study.
- (9) This film must be used along with lessons; it is equally useful as an introduction or summary.
- (10) The film can deal successfully with serious issues and causal relationships, and is not necessarily episodic.
- (11) The teachers' attitude over the details of a film which, on the whole, they rated highly, again indicates the standard that they demand.¹

408. Teachers' Views on Form and Subject of Films : Questions Posed. Apart from arriving at conclusions through consideration of the individual films and results obtained through their use, data was obtained from the answers of teachers who helped in the experiments, to the

¹ The opinions of the Producers of the films on these criticisms are given in Appendix A, 32.

following question : " What type of film would you prefer for use in your own particular type of school, both as regards

- (1) Form, *e.g.* mainly pictorial, or to consist largely of maps and diagrams.
- (2) Subject, *e.g.* ' dramatic incident ' films depicting definite historical events and people, or films dealing mainly with social background ? "

Many teachers confined themselves in their reports to criticisms of the particular film seen and results gained, but 61 sent in answers to the above question, 38 being teachers in Elementary, 23 in Secondary Schools.

409. Form of Film Desired. On the first point unanimity was absolute. All the teachers feel that the school film should be predominantly pictorial in form, maps and diagrams being introduced only when they are necessary for clear understanding. Naturally, the same reasons recur in the reports. It is a waste of time for the film to give what the teachers can otherwise present with adequacy. Animated maps shown many at once are not easily remembered. The appeal of films is narrowed if they consist largely of maps and diagrams, since, in the Elementary School at least, only the Senior classes can appreciate such work. Representative opinions follow. The first three are from teachers in Elementary Schools, four and five from Secondary teachers :—

(1) " As the essential feature of the film is motion, it would seem that the showing of maps and diagrams would be merely to lose valuable opportunities in other directions. In the geography lesson, aerial photographs would be instructive, but as history is primarily concerned with action and achievement, even aerial photographs without such action would be comparatively useless. Certainly, there is opportunity to bring the inaccessible places of historic interest within the four walls of the classroom, but in so far as the film is restricted to views of buildings and ruins, the same purpose is equally served by the ordinary lantern. To justify itself, the film must present such material as is incidental to the action portrayed."

(2) " I should prefer films that are mainly pictorial, as the animated maps and diagrams would only be of use to a Senior class, whereas the pictorial films showing general background would be useful at all stages and could be used in revision with the oldest pupils."

(3) A Headmaster writes from a country school : " Films should, I think, be mainly pictorial ; scholars of this age (Senior class, 12-14) particularly rural scholars, need much help with maps and diagrams."

(4) " It seems to me that there is more scope for films of this kind (social background), and that the preparation of them would be more worth while than films giving many maps and diagrams, for the latter can be shown on ordinary maps or on the blackboard, when pauses can be made for explanations. It is not really necessary to have a ' moving diagram,' whereas a ' moving picture ' makes an impression on the mind."

(5) "Whilst maps and plans are useful, I do not think the film should consist 'largely' of them. Maps which develop under the eye leave very little subsequent impression, especially if more than one or two are exhibited on a single occasion."

410. Appreciation of the Occasional Map. At the same time, there is very genuine appreciation of the effectiveness, and even for the necessity, of occasional animated maps, as they are used, for instance, in the Wolfe film, in due subordination to a scenically told story. "Maps and diagrams are essential, but should not be too frequent. They also must be distinct, and must show in a striking manner what is desired to be seen. In this respect the map of the St. Lawrence was too 'atlas-y.' In 'Naval Warfare,' the maps showing blockade and movements of the fleet were very good indeed, but those showing the countries over which Napoleon obtained power were not sufficiently striking; the black approached too near the grey." "Maps or diagrams are effective aids in any historical film, and especially so where these are 'movies' also, *e.g.* :—

- (a) Colour changing to show expansion of territory. ('Wolfe.')
- (b) Variety of colour, *e.g.* Alliances. ('Naval Warfare.')
- (c) Arrows and Pointers. ('Naval Warfare.')

I should say mainly pictorial, but with maps and diagrams to ensure proper grasp of the subject and its time relation." Another report, after expressing an opinion of the value of "films illustrating costume and general life of different ages" proceeds: "Maps and plans, yes, as they are used in the League film to illustrate Treaty changes or to illustrate campaigns (moving blocks for armies crossing maps which show physical features)." Another says: "In the League of Nations film, the diagrams and maps were excellent, but not in the 'Napoleonic Struggle' film. The danger with maps and diagrams is that they may change too quickly to be grasped fully. I think that a film should be mainly pictorial, but I think that some maps are useful. The children liked the moving pointer in the Wolfe film." Teachers, then, think that the pictorial, rather than the cartographic and diagrammatic element, should prevail.

411. Films for Senior Forms. But the value of the diagrammatic film for Senior Forms has already been noted,¹ and many teachers in Secondary Schools add a rider on this point. "The films to be generally useful would be better in pictorial form. If the film could be reserved for special stages in history teaching, I should like for the Senior Forms a combination of the pictorial and diagrammatic as in the League film." "The type of film most helpful depends very largely on the age and attainment of the form. Those for Seniors should consist largely of maps and diagrams with some social." "It is impossible to say whether the film should be mainly pictorial or diagrammatic; it depends on the subject. Both types are useful and both appeal to children. I found that

¹ *Supra*, 323.

the older girls and more intelligent were very interested in the diagrams. Special comment by Form VI. was made of their value in the League of Nations film and by other forms in the Wolfe and Naval films. Particular comments were made of the effectiveness of the black-out maps in showing the extent of the World War ; this could not so easily be grasped without a map of this type. The less intelligent children realised the value and helpfulness of diagrams, though, naturally, both they and the younger children are more interested in the pictorial film."

412. Subjects best treated in the School Film. There is less unanimity over the sort of subject most profitably filmed, but no doubt on the preponderating view. The film dealing with social life is more generally considered helpful than any other type. Twenty-three teachers feel disinclined to use any other kind. Of these, six taught in the average Elementary School, nine in schools in very poor districts. Only ten teachers feel that the dramatic incident film is essentially the best. The remaining twenty-eight feel that they could advantageously make use of several types, but among this group, too, the social background film holds pride of place. This sort of film would solve a serious difficulty. "I consider that the dramatic incidents, if well told, will easily be remembered by the children. The social side is far more difficult to teach since it requires a wealth of illustrations not always of easily obtainable type. Here the aid of the film would be most valuable, to show people actually doing the things described and living their everyday life." This gives the gist of nearly every report on this matter, and the primary reason for the strongly expressed preference. Further, "Costume, arms, implements, impedimenta are certainly best seen in use and motion. Customs, tribal and national, are far easier and better portrayed than described." "The film *can* show much more effectively historic sites, manners and customs and dresses than by words only from the teacher." "Scenes or incidents giving social background would supply the details as to dress, customs, architecture, which are difficult to explain, and require the exercise of much imagination." Another teacher points out that "Films dealing with social life are desirable as this side of the subject is often neglected in an elementary text-book." "In using such films there is less danger of false emphasis, fewer unrealistic battle scenes to portray." One teacher says : "Surely the film can be most valuable as an aid to the teaching of history. My own feeling is that on the whole the 'social background' film will be more valuable than the incident film, unless the latter has value beyond the mere incident. . . . I think that the incident film tends to stress the military aspect, as often, though not always, the most emotional incidents are connected with military history. Also, I think, too, that there is the danger of trivialities looming too large." One teacher, discussing the Wolfe film, says : "It is difficult to get a film which will emphasise the more important points and at the same time retain interest. How far, therefore, will films of this kind encourage superficiality of thinking and lack of true historical perspective ? Some

corrective, I think, will be needed." Hence he concludes: "This experiment strengthens me in the opinion that the sphere where the film can be most useful and least harmful to the cultivating of the true historical sense is that of social and industrial history." Finally, films of social life avoid the difficulty of weak representation of leading figures; a teacher says: "I should like films illustrating costume and general life of different ages, *e.g.* (1) Pageantry of a mediaeval town, (2) Elizabethan scenes, rather than films attempting to depict definite people, unless the actor can be guaranteed to look like, and to be worthy of, the character he is representing. A weak imitation ruins the effect." To sum up, the film on social life fulfils a function difficult for a teacher to achieve by usual means, and at the same time avoids many dangers latent in the use of historical films.

413. The Value of the Dramatic Incident Film. The consciousness of such dangers, however, does not deter more than half of the teachers who reported on the type of film desired, from readiness to use the good incident film, though only ten teachers actually prefer these to other types. It is interesting to notice the composition of this group, which is made up as follows:—

(1) Secondary Schools	2	Boys.
(2) Average Elementary School	2	Boys.
(3) Schools in poor town districts . . .	6	(2 Girls. 4 Boys.

All these masters felt that the incident film possessed a stronger appeal for boys. In the first case, the master whose use of the Wolfe film is described in Experiment 93, felt, that with Senior boys in a Secondary School, a good incident film could be made the basis for critical work on the topic with which the film is connected, the subject having been previously studied by the boys in books. The view of the second master has been discussed in the preceding chapter.¹ He valued the film for showing history to be concerned with the lives of men and women, for awakening the sympathy of his pupils for the persons shown, for creating interest, and thought that this could best be done through biographical or incident films. In the two, average Elementary Schools the standpoint is the same; the incident film is more appreciated by boys of 12 to 14, and so is capable of arousing greater, permanent interest. In one case, the class had seen the Wolfe and the League film. In the other, the master had seen the effect on his boys of film *a, b, c, d, e.*

414. Special Value of the Incident Film in Schools in Poor Districts. The remaining six cases are from schools in poor areas where special difficulties exist. The teachers felt that a film portrayal of the well-known events in English History, the Norman Conquest, Becket, Magna Carta, and so on, would be invaluable, as far more likely to dissipate the lethargy of their pupils than the quieter action of films on social life. The

¹ *Supra*, 313.

teachers, in approving of dramatic incident films in their particular type of school, are not encouraging an easy reaction to the sensational. In four of these cases, an experiment with the Wolfe film showed that the interest roused was real; the boys were unusually ready to take part in the following discussion. One teacher felt very strongly that films should deal with definite historical figures, to make them more than a text-book name to the boys. Of the Roman Britain film, he says: "It missed the opportunity to make definite impressions of persons and events. The film failed to utilise the facts familiar to most children. Naturally, the boys expected to see Julius Caesar, Boadicea, and other famous characters of the period. Caractacus in chains would have made a great impression, as would the story of the first landing, but the film was utterly impersonal and thereby lost a great opportunity to fix definite facts about definite people." Scholars certainly appear to look forward to the representation of people of whom they have learned. Several times, when criticisms of the Roman Britain film have been asked for, children have said, "Why was not Julius Caesar shown?" "Why couldn't the landing of Julius Caesar be put in?" The master of the set of very backward boys with whom Experiment 41 was taken, wrote: "With a class like this, dramatic films would appeal more than films of social background."

415. Other Opinions from such Schools. Twenty-two reports were received from such schools. The six cases of preferences for dramatic incident films refer in four cases to boys of 12 to 14. The others were made in reference to girls of 8 and 10. In four cases where the boys' standards of similar schools are in question, the masters report that both types of film will be helpful, but one lays special stress on the value of films on social life:—"The type of film should include, first, all those things not so readily described *for pupils* by the text-book, such as dress, manners, habits, justice, work and play, buildings, castles, monastery, etc. Some dramatic films for each period might also be included, giving salient historical stories, but not overdrawn." One Headmistress and one Headmaster suggest that simple social background films would be useful for the Juniors—"A Day in the life of a Saxon" was the example given by the master; and dramatic incident films for the Seniors. Eight reports stress the value of films on social life. Three of these, from a Girls', Boys', and Mixed School respectively, are made in reference to the needs of a whole school, two to classes of Senior girls, four to classes of Junior boys.

416. Filming the Historical Novel for Schools. The remaining report from these schools suggests that scenes of social life and historical novels should be filmed. Several teachers have put forward this suggestion during the enquiry. Apart from the difficulty of finding accurate historical novels, experience does not suggest that such films would meet the needs of the history teacher. Attention would centre on the fictitious action, not on the background, while attempts to make the film more directly an instrument of history teaching by means of stops for the

examination of detail, would ruin the dramatic effect of such a film. The action in a school historical film needs to have historical significance in itself.

417. Suggestions on Subjects from Average Elementary Schools. Of the reports from thirteen average town schools it has been noted that six teachers prefer films dealing with social life, two, dramatic incident films. In one report a distinction is made according to whether the scene is laid in England or abroad. "In the case of history taking place in the homeland, as in the Stone Age, Bronze Age, and Roman life film, the need is for social life apart from pictorial effects. In the case of history occurring out of the homeland, local colour should predominate over social conditions, although the latter are essential. In this respect the Wolfe film was excellent and enabled children to visualise the conditions under which events took place." One teacher asked for, "subjects dealing with social life, thrilling narrative, and history in the making—current events." Four teachers suggest that use can be made of topical films. One teacher suggests that, in addition to films on social life, biographical films would be of use, and also films that could be used for special "Celebrations"; films on Joan of Arc, the Pilgrim Fathers, Livingstone, and Edison are instanced. This suggests an interesting variation in the use of the film. Presumably the whole school would attend and the film take at least a full period. It is an attractive idea, but, so far as I know, few schools work on the lines of these celebrations. The time-table is too sacrosanct for more than an occasional jettisoning; the claims of any one subject of the curriculum must not be undue, and to obtain the maximum effect from the film it must form part of the regular series of lessons, be shown only at the opportune moment in the syllabus, and be followed by discussion. Yet, though I would deprecate in general this school use of the film as a special "show," there is one recurring occasion when such use would be valuable and helpful. Many schools celebrate Empire Day. It is no easy task annually to devise some method of marking the day which is free from bombast and jingoism, that calls for recognition of the heroic past, whilst stressing the note of responsibility in the present rather than that of overweening pride. Empire films of the right kind, perhaps longer than those advocated for classroom use, would splendidly meet the occasion. But all the schools would want the copies at once!

418. Suggestions on Subjects from Rural Schools. In the three rural schools, all the Headmasters say that they could well make use of both types of film, and one adds that there is also scope for the biographical film.

419. Suggestions on Subjects from Secondary Schools. It has been noted that of the twenty-three Secondary School teachers who reported on this matter, eight wished to use exclusively films on social life, and two preferred dramatic incident films. Of the rest, three thought social films most generally useful, but one of these suggested in addition, story films

for Junior Forms of boys, another, diagrammatic films for Seniors, the third, the use of some incident and biographical films. One thought films dealing with Constitutional history would be as helpful as those more purely social: "Scenes illustrating mediaeval methods of justice, early colonisation, also contemporary events—local, British, or Imperial—could be shown, cf. *Empire News Bulletin*." Two considered social and incident films of equal value, another social and biographical, a third social and film versions of the historical novel. Two differentiated according to the age of the form, allocating films of social life to the Juniors, dramatic incident films to the Middle School, diagrammatic films to the Seniors. One of these makes several interesting points under this heading in his report. He writes: "Some historical subjects, of course, lend themselves to film treatment much more than others. The value of a strongly marked unity was shown by the conspicuous success of the Quebec film. I think that the unanimous preference of the younger boys for the Bronze Age film against the Stone Age one was due to the unity provided by the Boy Scout. For *Junior work* I suggest that the imaginative story can justly be applied to the historical film, those written by Miss D. M. Vaughan (published by Longmans) would make admirable films, if the costs of production were not too high. Thus a picture of life in a Roman house is likely to make a stronger impression if introduced as part of a story than in isolation. The film of 'Roman Britain' lacked unity or 'plot,' and this is, I think, one reason why the written work on it was not so good as I expected. For older boys I think that the diagrammatic film has a great value. In the Nelson film the battle tactics and the extent of alliances and blockades were made very clear. When dramatic incident is shown, care must be taken to avoid false emphasis. Mention of the French Revolution in class nearly always provokes a reference to the film of the Scarlet Pimpernel, or similar films depicting the Reign of Terror." Another teacher varies this distribution of the type of film, suggesting films of social life and dramatic incident films for Juniors, films of social life for the Middle School, for Seniors, maps and diagrams, with some social history. Another teacher writes: "The film has undoubted value in some directions. It appears to me that it could give most valuable aid at present in—

- (1) Tours of archaeological survey—Egypt, Babylon, Assyria, Syria, Rome, Athens, etc., etc. An alluring prospect.
- (2) Depicting life, customs, methods, etc., *e.g.* mediaeval arts and crafts, cottage industries, old transport, etc.

For the dramatic narrative, it appears to me that without professional perfection of apparatus, staging, and dramatic skill, the film is, unfortunately, inadequate. At present our hope would seem to be to secure the co-operation of the big film corporations. Pictures of the type of 'Quo Vadis,' 'Ben Hur,' 'Nelson,' 'A Royal Divorce,' 'Captain Blood' (I have not seen it, but I believe it gives the Spanish Main flavour quite well), etc., if produced with full attention to historical accuracy, can have

sound educational value akin to that of the historical novel. If our Government would help to produce a series of Imperial films with the same accuracy and sincerity that is possessed by some of our war films ('Mons,' 'Q Ships,' 'The Somme,' etc.), a very great service could be done to history teaching."

420. Children's Views on Type of Film desirable. The teachers' views have been considered. Can the children's opinions on the subject and form of film be of help? They have been discovered both from oral questioning and written test. Many of their points have been discussed in the sections devoted to criticism of the different films. It there appeared that the majority of scholars prefer films dealing with definitely scenic matter; girls and boys of 15+ and upwards are interested in the diagrammatic film. Younger pupils are pleased at the ingenuity of moving maps, if only a few are shown, and in these circumstances remember them, especially those of the blotting-in type. It seems that the dramatic incident film makes a strong appeal to children, and its field of use, from the point of view of the age of the scholar, is almost as wide as that of the film dealing with social life, for children up to the age of 15 enjoy the portrayal of actual characters of whom they have heard, and gain an access of reality from their presentation on the film, not the reverse; pupils become critical of the film's character delineation at about the age of 15, but the majority even of Senior scholars felt that the Wolfe film gave them greater insight into the personality of most of the people portrayed.

421. Films suggested by Boys aged about 13. Boys of about 13 think of films in terms of incident films. The sixty boys of Set D, boys aged 13 years 3 months in an Elementary School, and the sixty boys of Set G, pupils aged 12 years 8 months in a Secondary School, were asked what films they considered would be "helpful." Emphasis was placed on the fact that "helpfulness" was to be their criterion, not excitement or enjoyment. The lists from the two schools are very similar. Every boy gives several battles; "The Great War" is most often called for, then Hastings, Agincourt, the Armada, Blenheim, the French Revolution, and Napoleon's battles. Next in favour are "voyages of discovery." The number of biographical films given is large; lives of men of action, Raleigh, Drake, Columbus, Clive, Cook, Nelson, Alexander the Great, Richelieu, Napoleon, and Joan of Arc, are popular. Many ask for films on "Inventions," "The Making of Machinery," or "The Industrial Revolution." Then, strangely, a recurring entry is, "Life in a Monastery." Several say, "Scenes from everyday life at different times," or some such phrase. "Life in the Middle Ages" recurs, and "Life in Elizabethan times." We are not likely to give the boy the surfeit of battles for which his young soul craves. We can argue from the list that he is ready to be interested in any type of well-constructed film. I think, also, we should take note of the number of times Monastic Life is mentioned, and the obvious interest for boys of this age of the biographical film. Such films would

frequently need, however, to deal only with the public career of their subjects, or to be so selective as to give no true view.

422. Films suggested by Boys aged 14 years 10 months. The boys of Set H, in answer to the same question, show an almost equal fondness for "Wars," again the Great War in particular. These are all the suggestions apart from the names of battles or wars. The number of times a suggestion was made, if more than once, is given in brackets.

- (1) Biblical happenings.
- (2) Life in an Ancient Greek City.
- (3) Augustine and the Conversion of England.
- (4) The Life of King Arthur. (2.)
- (5) Reign of William the Conqueror.
- (6) The Crusades.
- (7) Magna Carta.
- (8) The Political Life of Edward I. and II.
- (9) Life in a Mediaeval Town. (2.)
- (10) Ordinary life in different periods. (4.)
- (11) The Reformation.
- (12) The Renaissance.
- (13) The Conquest of Mexico.
- (14) The Life of Mary Queen of Scots (to show the houses, customs, and dress of the time).
- (15) An Elizabethan Theatre with a Play in progress.
- (16) Elizabethan Sea Dogs. (3.)
- (17) The Pilgrim Fathers.
- (18) Charles I. and Parliament. (2.)
- (19) Naval Development under Blake. (2.)
- (20) The Development of the Navy and the Founding of Naval Tradition. (2.)
- (21) The Development of the Army.
- (22) The Plague. (2.)
- (23) The Fire.
- (24) Commercial and Colonial Rivalry of France in the Eighteenth Century. (2.)
- (25) India in the Eighteenth Century. (2.)
- (26) Clive in India.
- (27) English Society in the Eighteenth Century.
- (28) Proceedings in old Government Systems. The Parliament, the Cabinet, different Meetings and Courts held.
- (29) Parliament in Walpole's Time. (2.)
- (30) Transport in the Eighteenth and Nineteenth Century.
- (31) The Industrial Revolution. (2.)
- (32) The Life of Napoleon.
- (33) The Development of Architecture. (3.)

As might be expected, there is far less stress on the biographical side ; there is the same catholicity of interest.

423. Films generally suggested by Pupils. Similar questions have been frequently asked in oral lessons. Children give the matters in which they are interested. Few general tendencies are discernible, but the primary interest of boys lies in warfare and in inventions; a film on the industrial changes of the eighteenth century seems called for. All ages of scholars, boys and girls, suggest both incident films and films of social life, though naturally definite episodes are most frequently suggested.

424. Children's Criticisms of Films A, B, C, and D. The boys of Set G were also asked to criticise the films they had seen in school. Few criticisms were given, the most common being that the films were too short. Those given, however, show that quite young children notice faults of construction. A boy of 13 writes: "I think one of the chief things I disliked in Roman Britain I. was, that the actors in it did not give the film the atmosphere of the ancient times. They seem like mechanical dolls, moving arms and legs mechanically. Again, it did not depict anything of historical value. I think that we do know how the Ancient Britons hunted, and that something of more value could have been put in, for these films are intended to give us knowledge." Another boy thinks that the Roman Britain film "switches off from one part to another too quickly." A third was wanting portrayal of definite facts of the conquest. "'Roman Britain' may have been improved by telling more of the Britons than their customs." One criticism runs, "'Roman Britain' could be improved by having a story of the same time, and so it would explain it more."

425. Children's Preferences between Films A, B, C, D. Twenty of these boys who had seen "People of the Axe," Reels I. and III. of "Roman Britain," and "Wolfe," were asked which they preferred, and why. Two preferred "People of the Axe," "because it is about a boy of my own age." One liked "Roman Britain" III.—it was exciting. Seventeen preferred "Wolfe," mostly as being the longest and most thrilling. One, however, said, "It was a story and the others only gave examples," and five others expressed much the same view. Of twenty who saw "People of the Lake" and the first and last reels of "Roman Britain," seven preferred "People of the Lake"; they found it exciting. The others liked the last reel of "Roman Britain," and for the same reason. In suggesting improvements, two of this second group want the film shown more quickly, one a larger screen, one films that are "longer and livelier." The only two other suggestions run, "'Roman Britain' would be improved by showing a day or two in the life of one person," and "They would be improved if there was a main character in them all, as in 'People of the Lake.'" Of seventeen girls aged 12 years 11 months in Set F who had seen "People of the Lake" and the same two reels of "Roman Britain," eleven preferred "People of the Lake," but they give no reasons beyond that it was more interesting. Eighteen girls of the same school had seen "People of the Axe," the two "Roman Britain" reels, and "Wolfe." Six preferred the

film on the Stone Age. Two found it interesting. One said, "I preferred the film of the Stone Age because it had a story running through." Three are interested in the fact that a child of their own age was the central figure, and one of these, the girl with the highest I.Q. of the sixty tested in Set F, felt that the simplicity of the film was helpful. She said, "I preferred the film on the Stone Age because in it we were shown a boy of about our own age, and it aroused my interest more than the Roman Britons fighting and other crowds of people, because there was one person in the Stone Age on which we could fix our interest." Many children in the course of the enquiry have expressed pleasure in the films on the Stone and Bronze Ages for this same reason, the attraction of a child in the leading part. Six of this group preferred "Wolfe" because of its length and excitement, three Reel III. of "Roman Britain," two because of the fight and one because she was shown this reel with frequent stops and full oral commentary so that she easily understood. Three found the subject matter of Reel I. of "Roman Britain" "more interesting" than that of the other films. That is to say, such criticisms on form as girls and boys of 12+ are capable of consciously making, suggest the need for unity and simplicity. A few children in the course of the enquiry, when asked to criticise the films, have suggested the use of a larger screen, a few, the introduction of "Talkies."

426. Conclusions. In this search for the most useful type of school film the following conclusions have been reached:—

(1) **Films should be short**; if used for introductory purposes when exact knowledge of detail will later be expected of the class, they should not be of more than 15 minutes' length. This gives as much material as scholars can easily assimilate at once, and more than sufficient to supply the basis of discussion for the rest of a lesson period of 40 to 45 minutes. It will sometimes be difficult to give the detail of an incident film, the detail which makes the film more interesting and valuable than the spoken story, in this time. In no case, however, should the film take longer to show than 30 minutes, to allow for its easy use in the 40 minutes' lesson which is usual in many schools. Films depicting social life should have related short reels of 15 minutes' length, like those of the Roman Britain film, so that these may be shown separately or together.

427. (2) The Films must be an Artistic Whole. Unity will naturally appertain to films of many historical incidents. It must also be achieved in films of social life. Children do not retain a vivid impression of life in Roman Britain as a whole when shown all three reels together, because of the disconnected nature of the scenes. Reel III. of this same film is well remembered, for children see it as the narrative of one rising. All the action must have historical significance and irrelevant scenes be avoided. The League film shows that the presentation of ideas in logical sequence gives unity to a difficult subject, and that children of 11+ can reproduce without further help the line of thought presented. To attain this end

of unity the imaginative story as used, for instance, by Miss Eileen Power in *Boys and Girls of British History* might well be applied to films of social life intended for Juniors. The use of the boy Fleet as the central figure of the Stone Age film in large measure provided the necessary unity for this film. The grouping of incidents in a film on social life round the figure of a child appeals strongly to pupils up to the age of 13. It is, however, an artifice inapplicable to many topics, narrows to some extent the scope of the film, and confines its appeal to Juniors. Consequently it is an unwise form to adopt until the stock of films is so wide that younger and older pupils can be separately considered.

428. (3) **School Films must be Primary Creations**, not a synthesis of cuts from longer films, if they are to possess this essential unity.

429. (4) **The Historical Film should be mainly Pictorial**. The film should aim at providing what is impossible to the teacher by other means. The Naval Warfare film is of little value, since it is practically a chronological summary of events, such as is easily worked out with the class on the blackboard. A full-length picture of one naval engagement of the period, with detailed scenes of life aboard, would have been a far more useful supplement to ordinary lessons, since a teacher cannot give an oral picture of conditions in such detail nor so vividly as the film. Thus, the historical film should deal mainly with scenes of actual life, so supplying the background a teacher cannot easily suggest.

430. (5) **Scenes should not be Fugitive**. Such pictorial scenes should not be too fugitive. Teachers have found that some of the scenes in "People of the Axe" and "People of the Lake" which show the occupations of primitive man, and those in Reel II. of "Roman Britain," passed too quickly from the screen for the children to realise properly what was taking place. The scene should remain sufficiently long on the screen for details of settings, houses, dress, and so forth to be noticed, as well as action.

431. (6) **Maps should be of the Animated Type and Bold**. The minimum number required to elucidate the geographical aspect of the subject under consideration should be shown, as otherwise—

- (a) The maps are confused in the children's minds, though they make an impression at the time.
- (b) In a dramatic film they break the story. A lasting impression is made by the use of one or two animated maps. Children remember the two last maps of the Wolfe film showing the movements of the opposed armies by dotted lines and the drawing of a black sheet over the territory gained by England. For the creation of a general impression of vast extent, and so forth, as apart from the teaching of precise details, animated shaded maps are very effective. It seems that the film can perform a very

special function in combining the use of maps with the depiction of events in their correct geographical setting. Events cease for children to take place "in the-air," and the close connection between History and Geography becomes plain to them.

432. (7) **It is undesirable to picture Modern and Earlier Peoples in the same Reel**, as in "People of the Lake," for

- (a) The attention of the child seems to focus on the familiar modern.
- (b) The dull child confuses the manners and modes of the different epochs portrayed.

This suggests also that the portmanteau film proposed by some teachers, "Dress through the Ages," "Ships through the Ages," would leave confusion and not clarity in its wake.

433. (8) **The Presentation of the Material must be extremely Direct.** Many children under 13+ failed to understand the analogies in the League film.

434. (9) **Sub-titles must be Short and Simple**, terms unfamiliar to children being avoided. Young children did not understand some of the terms used in the Roman Britain film, *e.g.* basilica, and did not follow the dialogue between Pitt and Anson in the Wolfe film.

435. (10) **Similarity of Scene must be avoided**, for like scenes are confused, *e.g.* the study and cabin scenes in the Wolfe film, the different parts of League organisation in "The World War and After."

436. (11) **The Scenes should not be Overcrowded.** Many pupils aged 12 to 14+ find difficulty in following the massed movements of the Wolfe film.

437. (12) **Accuracy is Essential** not only in archaeological detail but in historical atmosphere. In showing concrete detail, the forms shown should be not only true but typical, *e.g.* things like the mushroom-shaped altar in Reel I. of "Roman Britain" should be avoided. The creation of the right atmosphere in part depends upon the acting. It is very necessary that this should be simple and sincere, and consonant with the times portrayed, *e.g.* the affected languor of the actress in Reel I. of "Roman Britain" is entirely false to the spirit of Britain in A.D. 43. Accuracy and likelihood must on no account be sacrificed for the sake of heightening dramatic effects, *e.g.* as in the quarrel of Montcalm and Vaudreuil, or of obtaining the spectacular, *e.g.* the solitary race of the war chariot in "Roman Britain." Of such things children are the first and keenest critics. Reconstruction must not be attempted on inadequate knowledge. On this ground, some teachers oppose the filming of scenes of the life of primitive man.

438. (13) Generally, it will be well to avoid Scenes where it is scarcely possible to obtain an Effect of Reality, *e.g.* battle scenes. The question as to how far the unhappy side of life can be depicted for children has been raised in the enquiry. In general, no conclusion has been reached, but the majority of teachers, men and women, feel that warfare must not be pictured unless it is shown stripped of glamour.

439. (14) Representation of Important Historical Personages. Historical figures should not be shown unless the actor bears some physical resemblance to the man he personates, and gives of him a not unworthy presentation, *e.g.* Pitt, as shown, in the Wolfe film, suggests a character almost of triviality. In this connection the criticism of one teacher should be remembered: "Close-ups, particularly of persons representing some particular historical personage, are hardly convincing; long shots are better and more helpful."

440. (15) The Films should be well produced and particularly clear to the Eye. Some teachers have feared at the outset of an experiment that the children would compare the films unfavourably with the super-films which many of them regularly see. They generally found that their pupils were very ready to appreciate the simpler film. But teachers expect artistry as well as scholarship in the school film, as a very definite aid in training their pupils' aesthetic sense. The poorer the district the more valuable a contribution can the film make in this respect. Many times in the enquiry the deer scene in "People of the Axe" and the corn-field scene in "Roman Britain," have called forth the children's admiration from sheer attractiveness of setting. The remark of one teacher that an imperfect picture may very likely help the children more than perfect words has been noticed, but generally the view is taken that the school film must be as perfect as possible. One teacher writes, for instance: "Only films which have something definite to teach and are perfect in construction and historical accuracy should be shown. To show anything less than the perfect is fatal." Another closes his report: "It will be interesting to see if such films will ever come into use as a regular aid in the teaching of history. If this is so, then films will be standardised, *e.g.* one film on the Ancient Britons, one on Cromwell. If this happens, then these films will have to be next to perfect, and a great deal of money spent on them." When bodies of teachers have seen the films—such meetings have been held in Leeds, Bradford, and Bedford—this point has been invariably raised: "How is the money to be acquired to obtain really excellent school films?" The teachers always opine that no forward policy is possible without government subsidisation—but in England individual initiative is more commonly the motive force in such enterprises.

441. (16) Various Types of Films can be useful. Of sixty-one teachers who reported on this point, twenty-three wished for films on social life, ten for dramatic incident films; the rest felt that they could advantageously

use either type, but most of this third group gave the social background film prior place.

(a) The first need, then, is for a series of films dealing with social life. They would supply a definite lack, since text-books often deal briefly with such matters, and the teacher requires both much time and a wealth of illustrations to create an adequately detailed background.

(b) Films showing actual historical events have peculiar disadvantages, the difficulty of portraying leading historical figures, the danger of bringing minor but spectacular episodes into over-prominence. They are also less necessary since, while it is difficult to ensure that events are seen in a correct setting, it is comparatively easy to suggest action to the child. Yet many teachers feel that their children profit from seeing films of momentous events dominated by well-known historical figures; these people thus come to life. There seems to be real scope in the schools for films on actual events, particularly with pupils up to the age of 14+ or 15. In Senior Classes in Elementary Schools in poor districts, particularly in boys' schools, it is likely that the necessary creation of interest and stirring of the historical imagination can be better achieved by the dramatic incident films than by those of other types. The time demanded by the film-showing and the necessity of avoiding false emphasis dictate that such films shall deal only with the most important events or with episodes that can stand as type for many others—as the Wolfe film illumines the whole of eighteenth-century warfare.

(c) In the Upper Classes of Secondary Schools short films making use of animated maps and diagrams, chiefly to clinch work already studied, would seem to be both attractive to the scholars and useful.

(d) There appears to be a place for the biographical film. Several teachers think they would be helpful, and as many boys of 12+ to 13+ suggest them, they would appear to be psychologically sound to that extent.

(e) Several teachers have suggested that good topical films might be used, *e.g.* extracts from the topical budget.

(f) It is inadvisable to film the historical novel for purposes of history teaching. Many such novels are marked by gross inaccuracy, and, in any case, interest would centre in the fictitious plot rather than in the setting.

442. (17) **The Film need be neither Episodic nor Superficial.** The use of "The World War and After" has shown that the film is not necessarily episodic or concerned only with the more superficial aspects of history, but that it can be made the vehicle for serious teaching on serious issues; it can be in many respects an effective medium for the teaching of cause and effect, of man's motives and of his generative ideas as well as of his actions,

443. (18) **Co-operation of Teacher, Expert, and Professional Producer needed.** The school film, which must be appropriate to the age and attainment of the child, and have historical accuracy and technical excellence,

can be produced only through the co-operation of the practical teacher, historical expert, and professional producer.¹

¹ It is interesting to note that a teacher who has for some time been watching the effect of the cinema-house picture on school children came to the following conclusions, which he kindly sent to me. "With regard to historical films I would always emphasise the following points. First, the facts and the background must be absolutely authentic and reconstructed with extreme care. Secondly, the film should not be too long nor include too much. Thirdly, it should be brought as nearly as possible into line with films shown merely for entertainment by being largely narrative. Fourthly, there should not be too many maps and diagrams; otherwise the large amount of matter to be assimilated causes the impressions in the pupils' minds to be hazy. But I would ring the changes as often as possible between maps, charts, contemporary cartoons, and continuous pictorial narrative."

CHAPTER XIV

PRACTICAL CONSIDERATIONS

A SCHEME OF FILMS FOR HISTORY TEACHING—THE INSTALLATION OF THE APPARATUS IN SCHOOLS

444. Regular Use of the Film is justified by Results. Many teachers in Secondary Schools, sincere in their appreciation of the value of the film, feel that scholars should not see them frequently in school, certainly not oftener than once a term. Most teachers to whom I have talked in the Elementary Schools would welcome the opportunity of more frequent use, and there is no doubt but that the film can be of particular assistance to the non-specialist teacher. I should like any classes that I was teaching, whose ages fell between 12 and 15, and in any type of school, to see suitable films twice a term. It is comparatively easy to interest scholars in history in the sense that they enjoy history lessons, like to listen to what the teacher has to say, and to find answers to the questions put ; it is less easy to get a whole class, aged perhaps 13, all the children, not one or two of the brightest among them, eager to ask questions themselves. The film has this power. The capacity of the film to rouse interest and provoke thought, particularly to give the backward a genuine appreciation of the subject as concerned with human beings like themselves, justifies its regular use. The historically minded grip the subject however it is taught ; a method that patently helps the backward child should not be one of only very occasional resort. For this reason I think that in the type of school considered in Chapter IX., schools in poor areas where teachers and scholars labour under special difficulties, it would not be amiss to show films three times a term.

445. Practical Reasons preventing frequent Use of Films. But at present there are many practical difficulties to solve in using the film ; the history teacher will not have the monopoly of the projector ; as yet there is no supply of suitable historical films, and it will probably be long before such films exist in any numbers. It is unlikely that each class will be able to see historical films oftener than once a term even if the schools acquire projectors. Allowing for one film a term, what twelve topics are most suitable for filming to help the teacher with an outline course of English History, the usual four-year course with scholars aged 11 to 15 ?

446. Subjects : General Reasons underlying Choice. Probably no two teachers would have identical views. Twelve subjects are proposed

below. It seems useless to relate them to a definite syllabus, since the periods covered in a year vary considerably from school to school. The films suggested deal in the main with Social History, in accordance with the consensus of opinion amongst teachers who have assisted in the enquiry, but, equally in accordance with general opinion, other types of films are also proposed. In any case, none of the films are a mere collection of details on dress, houses, or customs. Choice has depended on the value of the subject for study. The underlying notion has been to avoid spectacular fighting, to deal with the life of the people, to choose topics which interpret their period or indicate the emergence of the present from the past. And, naturally, the nature of the medium has to be considered ; not all the important topics of English History are suitable for presentation by the film.

THE SUGGESTED LIST IS :—

- (1) Roman Britain.
- (2) Life in and around a Norman Castle.
- (3) A Norman Manor.
- (4) Life in a Monastery.
- (5) A Mediaeval Craft Guild.
- (6) Chivalry.

MODERN PERIOD

- (7) The Renaissance and Reformation in England.
- (8) The Rise of the Middle Classes in Tudor Times.
- (9) Oliver Cromwell.
- (10) Imperial Expansion.
- (11) The Industrial Revolution.
- (12) The League of Nations.

447. Reason for Selection of the Individual Topics. (1) **Roman Britain.** In dealing with this topic, British History is related to the wider story of World History, and it is very necessary to impress on the children the contribution of Rome to world civilisation, the meaning of such things as Pax Romana and the Roman love of Law. Further, though secondarily, many Roman antiquities are to be found in all parts of England, and we have postulated that the interest of our pupils should be aroused in these.

448. (2) Life in and around a Norman Castle. The remaining five films on the mediaeval period are chosen in an attempt to interpret for the child the structure of mediaeval society and the mediaeval spirit. The framework of society from the tenth century onward was feudal. In the twelfth and thirteenth centuries feudalism is "the basis of local Government, of justice, of legislation, of the army and of all executive power."¹ We do not try to explain all this to the young school child, but it is

¹ H. W. C. Davis, *Mediaeval Europe*, p. 88.

essential that he shall have some understanding of the system. This film, while giving a picture of the daily life of the baronial class, will give concreteness to lessons on the feudal régime, and, in picturing the strength and importance of a great feudatory, will illumine the mediaeval conflict of crown and baronage. It is assumed that the relations of the owner of the castle to superior and tenant will be indicated, his responsibilities as well as his pleasures.

449. (3) **A Norman Manor.** (The working of the land.) This film is complementary to the preceding one, giving further completeness to the children's picture of social conditions at this epoch. A film on the manorial economy and system of husbandry will help to give clear realisation of the daily life of the greater proportion of English people for many centuries. A film on one "generalised" manor, true to type for one specific period, need not create a false impression that each manor was as like the next as two peas, nor that details of manorial organisation remained unchanged through successive generations. Such matters can be made clear in oral lessons. Granting the difficulty of reconstructing for the film a typical manor, even a typical Norman manor, it remains true that such a film would give the children a picture of rural England, true, in its broad features, for many centuries. And, in seeing the demonstration of the three-field system in working, children would learn something of the distinctively co-operative methods of mediaeval times, as contrasted with the individualism of our own.

450. (4) **Life in a Monastery.** Much of the work on the mediaeval period is devoted to leading children to understand the power and influence of the Church, though it may never be stated to them in any set terms. They should realise the rivalry of Church and State, as they do that of King and Barons. They should know that the Middle Ages were devout, religious aspiration leading folks to go on pilgrimage, to crusading zeal, to the founding of mendicant and monastic orders. This film is suggested in that the monastic life is the fullest expression of mediaeval religious idealism, without some sympathetic feeling for which, the period will be to the children as a closed book.

451. (5) **A Mediaeval Craft Gild.** As the film on the manor gave a general background for country life over many centuries, so a film on a craft gild, though it will necessarily deal with the features of gild life true of one definite period, will, in its general form, illumine industrial life and town life throughout the mediaeval period. It is far less gild pageantry that should be indicated than the gild's control of industry. Treated broadly, to include, for instance, the travelling of craft brethren in search of raw material and to sell goods at fairs, it will include a picture of mediaeval travelling conditions and of trade. Indication of such matters as gild concern for sound workmanship and of the spirit of co-operation and brotherhood will further help to create respect for the

mediaeval outlook. There is, of course, in all these films, no question of painting an ideal picture, but of approximating to the truth.

452. (6) **Chivalry.** A film on chivalry deserves a place as presenting the system of education and the code of conduct of the knightly class over a long period. Though it was a narrow code applying only to one class and but imperfectly practised, it gave some slight mitigation to the brutality of the feudal period. Further, "at the worst it had the merit of investing human relationships and human occupations with an ideal significance. In particular it gave to women a more honourable position than they had occupied in any social system of antiquity. It rediscovered one half of human nature. But for chivalry, the Beatrice of Dante, the Laura of Petrarch, Shakespeare's Miranda, and Goethe's Marguerite could not have been created, much less comprehended."¹ It has remained an operative ideal down to the present day.

453. **The Modern Period.** The films on social life suggested for the mediaeval period illustrated distinctive features of the time. Similar films do not so readily suggest themselves for later times. A series of films, *e.g.* Elizabethan scenes, London in the time of Pepys, London of the Coffee House period, though attractive, would advance us little in our understanding of English History, apart from the fact that such films would probably be confused in the children's memory as being insufficiently dissimilar. The well-marked strands to be studied in this modern era are those of the Renaissance and Reformation, with the long, ensuing religious struggles, the development of the constitution, Imperial expansion, later the Industrial Revolution, the growth of democracy, the Great War with its causes and results. The film should deal with some of these topics to help to direct upon them the children's interest and thought.

454. (7) **The Renaissance and Reformation.** Obviously these movements should be marked. Their influence is still directly active. It is difficult to decide how the film could best be employed to illumine them. It does not seem that the film can render easy assistance in dealing with the Reformation, the doctrinal aspect of which, in any case, is unsuitable for children's study. For the Renaissance a whole series of films could be used—Columbus' enterprises, or a film dealing with some of the English sea-dogs, the establishment of printing, the English humanists. A film on Sir Thomas More would seem to be an excellent supplement to oral teaching, for the influence of both movements is seen in the story of the life of one person, and that person, too, one of the most charming and noble characters in English History.

455. (8) **The Rise of the Middle Classes in the Tudor Period.** This film would need a more attractive title; its subject matter is interesting

¹ H. W. C. Davis, *Mediaeval Europe*, p. 107.

enough. Though the rise of a prosperous middle class is one of the most important aspects of the Tudor period, and the influence of this class marked in the struggles of the Stuart reigns, the ordinary text-book, more engrossed in political matters and religious developments, passes it over with scant mention. Children refer to the fact of the rise of this class glibly, but the words frequently mean little to them. A film could make good this lack of explanation. The scenes suggesting the new developments in agriculture and the expansion of trade would at the same time give a picture of Tudor England in town and country far more valuable than the unrelated scenes of Tudor Pageantry and Elizabethan life that some teachers have suggested. Moreover, many of the developments to be treated, *e.g.* the formation of the East India Company, had consequences still very obviously affecting the modern world.

456. (9) **Oliver Cromwell.** Among the series of films should be one suggesting the struggles that have attended the gradual development of our democratic constitution, the forthrightness and sacrifice of the many who have resisted tyranny. A film on Cromwell, eschewing the actual battles as much as possible (Drinkwater has shown how it can be done for the regular stage), would well illustrate the Stuart phase of the development of limited monarchy.

457. (10) **Imperial Expansion.** The schools need a series of films on the growth of the Empire. Children should understand how the Dominions were severally established and developed. Such a series of films would lead to greater understanding of existing problems and greater sympathy with Dominion aims. Colonial History, moreover, frequently receives in the schools somewhat one-sided treatment. It is not that a biased representation of events is given, but the first journeys of the emigrants are described, and thereafter little attention paid to the development of the settlement, unless wars of aggression or defence are in question or matters of revenue arise. The film would seem peculiarly fitted to make far more definite the children's knowledge of actual colonial life through successive generations.

458. (11) **The Industrial Revolution.** The industrial changes of the eighteenth and nineteenth centuries completely metamorphosed English social and industrial conditions. The England of to-day is incomprehensible without a knowledge of the change. Again, one film of one or two reels cannot cover all the aspects of this topic; a series would be valuable, but one short film could deal with some essential phase, as the existing scenario on the Woollen Industry treats of the change from the domestic to the factory system. One Headmaster of a large Boys' Secondary School wrote to me: "I think an urgent need of the North is a good film of the Industrial Revolution, and whatever expense it cost would be amply compensated."

459. (12) **The League of Nations.** The League of Nations' spirit is the most significant development of our times. It is essential that scholars shall understand the need for the League's inception, its organisation, and aims.

460. **Teachers' Suggestions of Film Topics.** Some teachers, in reporting on the type of film desirable, suggested one or two actual subjects for films. The list follows, the number of times a proposal was made being indicated in brackets if it was offered more than once. Suggestions, similar but not exactly identical, are grouped together. The list cannot be considered as fully representative, since such definite suggestions were not asked for, but it gives some indication of the general outlook.

461. **Films on Social Life.**

Primitive Man in Britain.

Tours of Archaeological Survey—Assyria, Egypt, Greece, Rome, etc. (2.)

Films of Antiquities—Hadrian's Wall, Caernarvon Castle, Fountains Abbey. (2.)

Social Life in Egypt, Greece, Rome.

The Life of an Egyptian Princess.

Roman Britain. (2.)

Saxon and Danish Conquests. (2.)

Saxon Life. (2.)

{ The Manor. (8.)

{ Agricultural Processes in the Middle Ages.

Life in a Castle. (5.)

Life in a Monastery. (12.)

The Coming of the Friars.

Pilgrimages—Chaucer's *Canterbury Tales*.

{ Life in the Mediaeval Towns—apprenticeship, craft gild, etc.

Pageantry of a Mediaeval Town. (2.)

Gild Pageantry.

{ Mediaeval Arts and Crafts.

{ Primitive Trades.

{ A Mediaeval Fair. (3.)

{ Old Transport. (2.)

{ Life in Different Types of Houses.

Mediaeval Methods of Justice. (2.)

Chivalry (Life and Training of a Knight, Squire, Knighthood, Tournament). (4.)

The Peasants' Revolt. (2.)

The Renaissance.

The Reformation. (Connected social changes, English martyrs.)

Elizabethan Scenes. (3—with theatre.)

Social Life in Stuart Period.

James I.—his Progress to London.

Scenes from Pepys.

Elizabethan Seamen—not only defeat of Armada, but first voyages to India, beginnings of overseas trade, the galley and the sailing ship.

The History of British Commerce.

Commerce—Trade Routes of the Middle Ages : Joint Stock and Regulated Companies : Voyage to the Levant.

A series on the Building and Growth of the Empire. (7.)

London of the Coffee House Time and Type. (2.)

The Industrial Revolution. (12.)

Old Cottage Industries.

From the Domestic System to the Cotton Mill.

The Development of Machinery.

Changes in Houses. Growth of Towns.

Power—wind, steam, oil.

Furniture—antiques and modern workshops.

Conquest of Space by Rail, Sea, Air.

The Navy, Warfare and Strategy, *e.g.* Battle of the Saints.

Episodes of the Napoleonic Wars—ships, soldiers, etc., shown.

The Growth of Parliament. (2.)

Scenes such as the Opening of Parliament (for young scholars in the provinces).

The Development of Local Government.

The Development of Education in the Nineteenth and Twentieth Centuries.

A Civic film, showing such things as the opening of Parliament and an ordinary session there, judges going to the assizes and an ordinary trial, a nursery school or babies' welfare, and so on, an example of huge modern manufactures, etc.

The League of Nations.

462. Incident Films.

The Norman Conquest. (3.)

The Crusades.

Magna Carta. (3.)

Voyages of Discovery. (2.)

The Spanish Armada.

The Pilgrim Fathers.

The Struggle of Charles and Parliament. (3.)

The Fire of London. (2.)

The Siege of Gibraltar.

Bonnie Prince Charlie. (2.)

Scenes in the French Revolution.

The Year of Revolutions.

A film showing how England helped Greece, Italy, Belgium, etc., in the nineteenth century.

463. Biographical Films.

Charlemagne.	Sir Isaac Newton.
Alfred. (4.)	Louis XIV.
Harold.	Richelieu.
Hereward.	Chatham.
Joan of Arc. (4.)	Captain Cook.
Rienzi.	Napoleon. (2.)
Caxton.	Bismarck.
Columbus.	Mazzini.
Savonarola.	Shaftesbury.
Luther.	Livingstone.
Drake.	Edison.

464. Installation of the Apparatus : School Projectors should allow for stopping the Film. It seems somewhat beside the point to discuss the apparatus since rapid strides are being made in the perfecting of projectors. One or two points deserve mention. When the room was well darkened the reports agree that the machine used gave admirably clear projection.¹ The teachers are unanimous in commending the fact that the projector allowed for regulation of the speed of the film and for stops ; they feel this to be essential in a machine for schools. Representative comments are : " I particularly enjoyed the section of the film which was taken more slowly and stopped at certain points for explanation. This makes the film far more valuable " ; and " The stoppage of the film at particular points was most valuable, and is, I consider, essential for teaching purposes."

465. Need for a Quiet Machine. The school projector needs to be as silent as possible. The buzz of the machine is distracting, and the teachers' comments are not always heard above it easily.

466. Size of Screen. The screen should be as large as possible. There is little effect of reality when small pictures of historical subjects are shown ; the people look like pigmies, and details of costume, architecture, and the like become almost undistinguishable. The size of the picture usually obtained during the enquiry, five feet by six, is adequate, but an even more convincing effect was achieved when a larger screen was used. Further, the larger the picture the more easy is it to arrange that every child has an undistorted view.

467. Difficulties of Cost, Room, Ventilation, etc. The present cost of such apparatus as will give an adequately large picture seems prohibitive

¹ Cf. Appendix D, 18, 19.

to many. I quote the most pessimistic of the reports that I received on this point. This History Master had not seen follow-up work with the films of the kind later developed in the enquiry ; he saw " People of the Axe " and the Wolfe film projected for two of the formal experiments, when the children did written tests afterwards without intervening discussion ; he fairly sums up the advantages of the film as he sees them, in giving detail of costume, custom, topography, in presenting ideally the narrative type of lesson—" The very best teacher cannot compete here if the film is well made." He then proceeds to count the disadvantages, as follows :—

" The film is decidedly *not economical* of—

- (1) Educational Expense. The epidiascope will be compared very favourably with the projector in this respect.
- (2) Space. The film demands a history-room with the projector a *fixture*, *i.e.* this means one projector for the *one subject*. Presumably Geography, etc., could make the same demand.
- (3) Time. The film is only practicable if it can be turned on, generally only for a few moments, just when its aid is required. Long films, to my mind, are not worth the time expended. And boys would not very willingly stay over school hours.
- (4) Energy. At first sight the film seems an economy. But unless ideally organised as in (2) (*i.e.* a *fixture*), it consumes far too much energy in arrangement and organisation."

He finally concludes, in consequence, that " The age of the film is not yet."

Another teacher, who had helped with Experiments 73, 80, and 99, involving eight classes of boys in a Secondary School, writes : " For the best use of a cinema as a normal instrument in schools I think it is necessary either that it should be usable in any classroom, or that, if a private room is required, it should be available without dispossessing another class. . . . History teaching needs constant illustrations of all kinds ; extracts from contemporary writers, pictures, and lantern slides are all in regular use. All are, however, relatively inexpressive. Is the amount of benefit to be gained by the use of the cinema in teaching History proportionate to the expense ? Not, I think, if it is used for History alone ; the money could be better spent in books. But it seems to me that the cinema has great possibilities and value for other subjects as well—Geography at once suggests itself, and the film of the cancer campaign showing the influence of radium emanations on cancerous growths, suggests that the cinema has an indispensable part to play in biology. History will be able to take its full share in using a cinema that has won its place in the school on these wider grounds. A careful and convincing reconstruction of manorial life, for instance, would be of great value."

Even more representative of the general opinion amongst teachers who had seen definite follow-up work is this comment from the History Mistress of Set F of the formal tests ; she had also helped in Experi-

ments 85, 86, 97, and 101, involving six classes aged from 13 to 18 : " I think there are great possibilities in the use of films in schools, either to supplement or revise work already done or to introduce a new subject. I think the installation of a projector would be of great help in the teaching of history once the initial expense is overcome." Several teachers have outlined schemes whereby the schools of a district could have a joint-projector. It is probable, however, that the cost of the apparatus would decrease if there were any large demand. Some system of ventilation will need to be arranged for in the film-room other than that by door and window until the day of the large daylight screen, for windows are necessarily closed to darken the room. Teachers, in general, felt that such practical obstacles were surmountable.

468. Projector and Screen should be Fixtures. It is, however, necessary that projector and screen should be fixtures, so long as the heavy type of machine used in the enquiry is employed, to economise time and the teachers' energy, and to ensure that ease in use without which all but enthusiasts are deterred from handling such school apparatus.

CHAPTER XV

THE FILM AND LATIN TEACHING

469. **Type of Test.** Five experiments were undertaken, using the Roman Britain film, to test the value of the film in giving colour to the reading of a Latin text. The teachers sent in very full reports, and since already many lessons have been described after use of this film, it seems best merely to quote these reports in full. In every case Reel II. and Reel III. were shown with frequent stoppings of the film for explanations and with a running commentary. In these explanations things were referred to by their Latin names.

470. **Experiment 108.** This was the least detailed of the experiments, discussion lessons following the film but no written work being done. The girls were aged 14, and had taken Latin for two years, one year of two lessons a week and one year of four lessons a week. The teacher wrote : " I found that the especial points noticed by girls were—

- (1) The making of the camp.
- (2) The actual battle.
- (3) The display of weapons before battle.
- (4) The armour.
- (5) The method of carrying the kit.

One girl noticed the word *agger*, which was a new word. Others had not remembered the word, but when they heard it again, they remembered its meaning. One girl said that the film was too quick, particularly where the chariot race was introduced. Some girls said a film of this sort would be helpful as a setting for reading Caesar. Others said they thought films with some sort of story would be more useful. Other girls said they had quite as clear ideas from the pictures in their books and did not think they learned anything new. These were mostly older girls. From the point of view of language teaching, I think a film of this sort would be extremely useful if from time to time a list of words could be put on the screen—I mean names, etc., of things shown. Apart from vocabulary, I think the film would be excellent to give colour to the reading of Latin texts. I think children would get better ideas of things from one film than from hours of talking."

471. **Experiment 109.** Boys aged 14+ saw the film. Before the showing half of them wrote accounts of what they knew of the Roman army, the other half made sketches of a Roman camp and of the equip-

ment of the Roman soldier. After the film and following discussion the same tests were repeated. Two reports were kindly given, the first from the teacher actually taking Latin with this class, the second from the Senior Classics Master.

472. I. Report from the Teacher of the Class. “(1) The film was definitely of use in giving a vivid picture of things before known to the boys merely by names and rough sketches on the blackboard. In class the boys showed keen interest and responded well to the invitation to ask questions and make criticisms. Some intelligent questions were asked by boys whose work is of a poor standard. I do not think the film stimulated discussion except in that it provided points upon which definite information could be asked for and given. Questions are readily asked in class, but take the form of wild guesses reminiscent of English History. The British behaviour and actions excited more interest than the Roman; this was especially so in the second part of the film. The form unanimously agreed that the second reel was more interesting, because more exciting, and but for one dissentient thought it had been of real value for their Latin. Criticism of such points as (a) the poor view of the camp, (b) most unmilitary marching, etc., were common. The written work and sketches showed a tendency to forget rapidly what had been seen. For instance, the Roman sword would be drawn to resemble (a) a stiletto, (b) a sabre.

(2) Personally, I think a much better film for the purpose of giving definite instruction would be obtained if the soldiers could be seen (a) putting on and taking off a sword, (b) displaying their various equipment, (c) building a *vallum*, etc. The intention of instructing should be more definitely kept in view. There might also be a film to illustrate the civil life of the Romans; naval matters also might be explained.

(3) The film was clear and good in itself.

(4) It is trying to combine lecture and projection. Stopping the film is definitely jarring—starting again almost as much so. The lantern has been described as the ‘grave of good lecturing,’ but the film is even more inconvenient to mix with oral instruction. The time taken to put up the instrument and dismount it is a factor that many would object to. A lantern takes only a few minutes.”

473. II. Report from the Senior Classics Master. “(1) The class had had some previous instruction (verbal and blackboard) on the subject.

(2) The film itself seemed open to criticism on the following grounds: (a) Incoherence, especially in Part I. Different aspects of the subject were introduced without much evident plan. In one place the captions appeared to have been mixed up. *Forum* in the caption was followed by soldiers marching under trees. (b) Irrelevance: there were many irrelevant episodes that confused the attention. (c) Omissions: in Part III., which was otherwise better adapted to its purpose, several omissions were noted. The camp was rendered unintelligible to many by

the fact that only a small portion, a close-up, was shown. There were no field engines, catapults, etc. (d) The film hardly did justice to the Romans in the way of military discipline and soldierly bearing, and over-emphasised the barbaric features of Early Britain. These are weaknesses that particularly strike boys who witness the film. (e) It tried to show too many things too hastily. If it had given us more time to take in what we saw and shown us fewer things we might have learnt more.

(3) On the other hand, the response of the boys to the film was decidedly good. They showed evident interest in the subject matter, which appealed to their age, and were quite ready with their questions about it afterwards, though they were also very ready with criticisms of what they regarded as weak spots. It did not appear that the duller boys were specially benefited. It was evident, however, that previous instruction was an important factor in intelligent interest. Subjects on which they already had some notions were more attended to and better absorbed, while matters not previously discussed, though appearing in the film, were neglected, *e.g.* the very prominent *signa* were never alluded to, though the lecturer stopped and pointed them out in the course of the demonstration. Comparing their work before and after seeing the film, it is evident that they were very vague in their ideas on many details beforehand. Their written work did not always reveal this, but the drawings did. After seeing the film, the definiteness of their mental pictures as evidenced by the drawings was quite marked. *But* it was also noticeable that many boys failed to express on paper new knowledge which it was evident from the discussion they had acquired : so that their paper knowledge may not always be an adequate key to their real knowledge ; or we may doubt if the less intelligent really grasp what they are shown on the film and orally until after repeated instruction.

(4) It left me personally with the belief that the film is a valuable means of stimulating interest and making the background of a Latin author more real. I do not, however, think that it is *necessarily* superior to the use of Lantern Slides, except possibly for reaching the very unimaginative.”¹

474. Scores : Experiment 109.

MARKS FOR WRITTEN TEST : EXPERIMENT 109.

	Before Film.	After Film.
1	C+	B+
2	B	B
3	B	B+
4	B	B+
5	B	B+
6	B	B+
7	B	A
8	B+	B+
9	B+	A

¹ Cf. *supra*, 313.

MARKS FOR DRAWING TEST : EXPERIMENT 109.

	Before Film.	After Film.
1	A-	A
2	B+	A
3	B	A-
4	C+	B+
5	C+	B+
6	C+	C+
7	C	B+
8	C	B
9	C	B

More boys were present at the film and lesson, but it was impossible to compare work before and after the film, for they mistook instructions in some cases, and did first a written answer, and later drawings.

475. **Experiment 110: Form Upper VA.** The teacher's report is given in full:—

“(1) Drawings were made by the girls of Upper VA. (School Certificate Form), age 15+. Before seeing the film the girls were asked to draw a Roman helmet (officer's and private's), the *scutum*, the *pilum*, the *gladius*, and the *lorica*. After seeing the film the same objects were drawn. The following table shows the result (classified with A, B, C, D) according to correctness and amount of detail :—

	Before Film.	After Film.		Before Film.	After Film.
1	D	A	9	D	B
2	D	C	10	C	A
3	C	B	11	D	C
4	D	A	12	D	B
5	D	A-	13	D	B
6	D	B	14	D	C
7	C	A	15	D	C
8	D	A			

SUMMARY.

D to A	3
D to A-	1
C to A	2
D to B	4
D to C	4
C to B	1

(2) Previous acquaintance with the subject matter of the film. The class had read Caesar's 'Gallic War' for one term. Little direct instruction had previously been given on the equipment of the Roman army, but the text-book used contained pictures of the objects they were asked to draw. They had a general idea of the organisation and administration of a Roman province such as Gaul in the time of Caesar, no knowledge of the later Imperial system.

(3) The film was undoubtedly of value. The children were eager to talk about the subject of the film both immediately after and in subse-

quent lessons where reference to it has been possible. Opinion was divided on the question of which part they liked best, some preferring to see what they had already some vague impression of, *i.e.* military activity, others the unfamiliar civil life. (Numbers were 7 for the civil, 8 for the military part.)

(4) Pupils' questions and answers :—

1. Was the film helpful ? Yes—(15).
2. How did it help ? (a) Now possible to imagine the Romans fighting.
 (b) It made clear the discipline and order of the Roman army.
 (c) It cleared up details, *e.g.* Roman nightly camp ; the bridge.
 (d) It gave a new conception of Roman civil life, especially of the baths.
 (e) It gave a new conception of the Romans themselves, derived from the picture of the Governor and procurator and the place of *ceremonial*, thus leading to
 (f) The idea of a highly civilised people, and giving
 (g) Some insight into Roman character.

(5) Suggestions and criticisms made by the girls themselves :—

- (a) There was no picture of a Roman road and soldiers marching on it, though the road is typical of Roman civilisation.
 - (b) Could the soldiers be shown *doing things* ? *e.g.* building walls, throwing up the mound.
 - (c) One girl wanted to see the ditch *the other side* of the mound.
- All agreed that the chief value of a film of this kind would be in making the whole subject more *alive*.

(6) Films most useful for Latin teaching.

(a) The 'Reconstruction' type, dealing with various aspects of Roman life. It seems to me that it might sometimes be possible to combine these with literature, *e.g.* in a film dealing with a day in the life of a Roman senator it might be possible to read before, and again *after*, passages from Horace, Pliny, Martial, etc., treating of the same subjects. Films of the 'dramatic' incident type would, I think, be less valuable, as the primary concern of the average teacher of Latin is to give an introduction to literature and the 'dramatic incident' in literature will speak for itself if only the pupils' mind is already equipped with the correct and adequate mental pictures that the words should call up.

(b) Films for this purpose should be largely pictorial.

(c) Projection. Sometimes the subject seemed to change just when it was becoming most interesting. At other times a closer view would have been desirable, *e.g.* soldiers resting after the march.

(d) If 'Latin' films were used in school under the direction of the teacher of Latin, it would probably be a decided help to have titles and sub-titles and all explanations in simple Latin. This would serve a twofold purpose :—

- (i.) Word and object would tend to be more easily associated.
- (ii) Desire to be informed fully on the subject of the forthcoming section of the film would act as a stimulus to translation !

476. **Form Va., average age 14+.** Number 29. This class had previously read some passages dealing chiefly with History and Mythology. They had no detailed knowledge of military things, and no knowledge of Caesar. Their answers about the film included the following : 18 preferred the social life film, 11 preferred the military life film. The 18 gave as a reason the fact that the individual was more clearly differentiated in the civilian picture. Military life tends to standardise things. Several spoke of 'reality,' actuality, the lifelikeness of the picture, and suggested that they would see more in their reading afterwards. One formed a general picture of Roman life as a whole, instead of the 'snippets' in her mind before. Roman life was seen to be impressive : the contrast was brought out between the civilised Romans and the uncivilised Britons : the meaning of Roman discipline was now clear. One girl was struck by the likeness of the Romans to ourselves. They were not nearly so remote as she had previously supposed."

477. **Comparison of Film and Still Picture in the Learning of Latin.** One or two points in connection with this experiment are particularly interesting. It appeared that in the case of some older girls, as well as younger ones, the detail of still illustration is overlooked. In discussing why the film was helpful, one girl said that previously she had always thought of Roman soldiers as wearing flowing robes. She was asked to get out her text-book and notice at the front the pictures of a private, a centurion, and a standard-bearer. Had she not seen these before ? She replied, "Yes, I know I have looked at them several times, but in spite of that I thought of them in robes till I saw the film." Another child, coming to the rescue, explained that the soldiers did not become real till they were seen on the film. The class was asked if ordinary pictures could not make them so. The general opinion was that this was not the case : "They are not real till we see them moving." One girl said : "I never think of anything but the words in a Latin lesson. The film makes me wonder." This is surely a tribute to any method. She was asked if she did not picture the scenes when translating, and replied, "No, I only think of the words as words, and never make pictures at all." The class chorused agreement.

478. **The Film makes the Romans more Human.** The teacher expressed surprise after the lesson with the younger form at the reasons given for their preference for the reel on civil life. They always thought

of war in connection with Rome ; it was pleasant to see another side and realise that there were different types of Romans, that not all were soldiers. The teacher pointed out that their texts had been on social life. " Yes," replied a girl, " but all our sentences are about war." The most marked fact that emerged was that the film made the Romans far more human. " I always thought of them as law-givers, never chatting and smiling." " I think of them in camps, not in houses." The teacher's private comment was, " That is most humiliating." She herself had always felt starved as a girl at school of details of ordinary Roman life ; she had consequently aimed at giving a picture of Roman home life to her pupils, avoiding a too exclusive use of martial texts. Yet all the class had said that they did not realise these things until they saw the film.

479. **Experiment 111.** An experiment was conducted in exactly the same way with another School Certificate Form of 17 girls whose average age was 16 years. The report runs :—

" RESULT OF DRAWING TEST

Form—School Certificate.	Before Film.	After Film.
1	E	B
2	D	B+
3	C	B+
4	D	B
5	D	B
6	E	B
7	E	A—
8	D	B
9	C	A—
10	B—	A—
11	E	C
12	E	B+
13	B	A—
14	C	B+
15	D	B
16	C	B+
17	D	A—

(1) **GIRLS' PREVIOUS ACQUAINTANCE WITH THE SUBJECT MATTER.** None directly. In their first year's Latin they discussed certain aspects of social life, *e.g.* Roman house, Roman dress, life in a Roman city, but no time is given to this side specifically—only as it enters into their reading.

(2) **CRITICISM.** This film is very good as a stimulus to discussion, with obvious weaknesses in the battle scenes. It is particularly helpful in explaining Roman equipment more vividly than by a dry catalogue of facts. The military film is an excellent accompaniment to the reading of Caesar as a set book, especially where children, being engrossed with the language difficulty, do not visualise sufficiently. The stimulus given by the picture may very possibly assist with language, by putting the whole subject in a more intelligible light and thus giving added confidence.

Response in Class. This was very satisfactory. The film was certainly of use. It provoked a good discussion, and the interest it aroused was not spasmodic. Constant allusions to it have been made in a helpful way in subsequent lessons. The majority were interested particularly in the military part of the film. A verbatim report of the lesson is enclosed.

(3) TYPE OF FILM HELPFUL FOR LATIN TEACHING :—

(a) Military.

(b) Pictorial, *i.e.* showing Roman sites, Roman camps, Roman temples and houses in their present condition and as they would be restored.

(4) ANSWERS AND CRITICISMS GIVEN BY THE CLASS :—

Was any one bored ? No.

Did any one find it entirely
unhelpful ? No.

How was it helpful ? In showing

1. The formation and equipment of the Roman army.
2. The shield wall.
3. Details of armour. (This came unanimously.)
4. Calling attention to things unsuspected before, *e.g.* wearing of trousers.
5. The carrying of baggage.
6. The chin-guard to the helmets.
7. Chariot manœuvres.
8. The forced march.
9. The *agger* of the camp.
10. The ornamental character of the standard.

(5) POINTS IN SOCIAL LIFE FILM WHICH WERE COMMENTED UPON :—

(a) The dandy.

(b) The different view of Roman character—the more emotional side.

The social life film was preferred by only seven girls. The reasons given were :—

(a) It explained things of which we knew less.

(b) It was more human.

(c) It was more real than the battle scene, *i.e.* more convincing.

(d) Town life is more difficult to imagine, and therefore such a film is more helpful.

The battle film was preferred by the remaining ten girls. The reasons given were :—

(a) It was more useful.

(b) It was more exciting.

(c) It makes reading more vivid.

(d) It shows a more characteristic side of the Romans, the side which had greater influence upon us.

The film as a whole was appreciated because—

- (a) It gives a clearer idea of Britain under the Romans.
- (b) It is stimulating to thought.
- (c) Seeing has more dramatic effect than reading.

The film was criticised as a whole because—

- (a) The battle scene was weak.
- (b) The marching was not very smart.
- (c) The battle formation was sparse."

480. **Experiment 112.** Another mistress from the same school reported on results with another School Certificate Division. She discusses the question of film lessons in detail ; some of her valuable comments have appeared earlier in the report :—

"The experiment was taken with the School Certificate Form, 14 pupils of average age 15 years 10 months. They are the Lower Latin Division of School Certificate, and their Latin is not very good, nor, with only one or two exceptions, is their general intelligence particularly high ; most have to work hard to reach even an average standard. They have been reading Caesar, *B.G.*, i., in which the Roman tactics with spear and sword are described in detail, and I had, when we came to this passage, laid some emphasis on the manœuvres, and had referred them to an illustration of a Roman legionary in their text-books. (In fairness to the film, it should be noted that I had already seen the film and so had had my attention drawn to the interest that attaches to equipment and tactics. I think that, if I had not known of this enquiry, and had never seen the film, I should probably have passed over Caesar's description without special attention.) Apart from this, and from some little knowledge about the camp, its rectangular form, and the avenues that divide it up, the subject matter of the film was quite new to them.

481. "*The Response of the Class.* I shall first give the results of the written work. The test took the following form. On the day previous to the showing of the film the pupils were asked to write what they knew of the Roman army, under the following heads :—

- (a) A Roman soldier—his equipment, weapons, armour.
- (b) The sort of tactics used by the Romans—how they used their weapons.
- (c) The army on the march, their camps, etc.
- (d) Anything else you know.

This was done in class, in 20 minutes. After they had seen the film and had a discussion lesson on it with Miss Consitt, they wrote answers to the same questions, this time without limit of time ; this, however, would hardly affect the result, as none of them wanted longer than 20 minutes for the first test. There was improvement in every case, in some cases very considerable. I marked in three classes—A, B, C (A over 65 per

cent., B over 40 per cent., C below 40 per cent.). There were six C's, seven B's, and only one A in the earlier test, no C's, five B's, and nine A's in the later. I give a list of the marks, with the percentage which the girls gained in the last terminal examination :—

	Before Film.	After Film.	Per cent. in Examination.
1	B (low)	A	55
2	C	A	49
3	A	A	79
4	B (high)	A	49
5	B	A (lowish)	62
6	B	A	49
7	C (poor)	A	43
8	C (poor)	B (not very high)	31
9	B (low)	B	52
10	C	B	58
11	C	B (high)	67
12	B	A	58
13	B	A	73
14	C (fairly high)	B	17

It is noteworthy, I think, that only two of the C's reached A in the second test (No. 2 and No. 7), and that neither of these is good at Latin, one being rather weak all round, and the other good on the scientific side. The other rather remarkable case is No. 9, but here, although the class remains the same, there is actually about 15 per cent. of difference in the quality of the answers. There is, then, marked improvement in every case. But there would have been improvement after an oral lesson, so the conclusion cannot be drawn from this alone that the film is valuable. Proof of this is got otherwise, and I come to it later. What I have noticed in nearly all the papers is that there is less addition of completely new information than filling out and making clear information previously acquired but only in a sketchy inaccurate fashion. Thus, the helmet is merely mentioned in the first attempt—in the second nearly every girl mentions its five parts; the spear is at first 'long' or 'fairly long,' afterwards 'six or seven feet long.' So with the sword and the cuirass, which some knew as part of the equipment but none could describe at all. After the film most had it clear, though one or two were confused between the leather *tunica* and the leather foundation of the cuirass. (The *lorica squamata* is not mentioned at all, although an example was shown and commented on in the film.) The standards were never mentioned before, and though several mentioned them after, not all did so: only one or two got the standard-bearer with his bearskin, and this was a point that was not known by any one previously. So with the centurions' *torques* and *coronae*; only one or two mentioned them after the film, none before. The camp becomes much clearer, and new points are added: *agger*, *fossa*, *intervallum*, almost every one gets these, and most with great accuracy. In the section on tactics the spear and sword manœuvre is clearer to those who had not remembered it before, and in addition many mention the

shield wall, *cuneus*, and *testudo*, which are very bad on the film, but which were explained clearly by Miss Consitt as they appeared on the screen. Even so, some confusion is apparent, due, I am sure, to the badness of the film at this point.

482. "General Conclusions from Results. I would draw two general conclusions from the results:—(1) That the pupils gain most if they are warned what they should watch for : what sticks most firmly is what they have already known something about. This is only an illustration of a well-known psychological truth, but it deserves notice if the utmost in information is to be got from the film. (2) That merely seeing the film does not impress details of information on the mind—verbal explanation accompanying the film makes the points go home. And it seems evident that an oral lesson with illustrations such as wall-pictures, postcards, or lantern slides, would serve the purpose equally well from the informative point of view. On the other hand, the pupils have obviously (it appears even in the informational test given) got much more than mere facts from the film, and such facts as they have are more living than they would be if got from verbal instruction or motionless pictures. The soldier is real as well as his armour, and he is immediately real : a good teacher may be able to make her subject live, but at the expense of much time and ingenuity ; the film does it at once. The *agmen* is now a moving living picture, not a mere 'Column on the march'—words have acquired colour and new significance in a way the value of which it is almost impossible to assess. Many remark on the abandoning of the fallen soldier ; that vivid detail, which rather terrified some, makes the relentlessness of the Roman in pursuit of his duty or of any end to which he has directed himself clear in a way that no amount of talking would do—and with an infinite saving of time. By moving pictures, then, life is put into details of information.

483. "The Follow-up Lesson. To turn now to the lesson which followed the showing of the film, and was taken by Miss Consitt. (The other division of School Certificate pupils was also present, so that some of the remarks quoted will not belong to the division of which I have hitherto spoken.) All agreed that the film was interesting and helpful ; every one found that the equipment was much clearer than before. Some had not known about the cuirass, and one girl had been especially struck with their wearing trousers. The *balteus*, the *caligae*, the details of the helmet, the shortness of the sword (one girl had previously imagined it to be long), the officers' medals, were all new to some, and in other cases an entirely new conception had been given. The shield wall and wedge formation were clearer to some. (But my written results show confusion in some cases.) It was a matter of amazement to most that such an elaborate camp should be fortified each night—they had never realised before about *fossa* and *agger* ; and one girl in particular was struck with the height of the *agger*. They would hardly believe that such precautions,

involving so much work, were taken for one night. The most interesting point that emerged was that only seven (out of about thirty-five) preferred the part dealing with civil life. The reason for their preference was, generally speaking, that they were glad to see the Romans more human than they had imagined them—the forum scene was mentioned by one; the dandy made her realise that Romans had emotions and temperaments differing one from another; till then, the soldier and law-giver, rigid, conforming always to a pattern, had been her idea of *all* Romans without exception. Other reasons given were that ‘the battle looked silly,’ and they got ‘tired of so much marching’—a criticism of this particular film. One girl gave the reason that ‘she did not like battles’—a good reason for providing alternatives, for girls at least, to Caesar in examinations and as an introduction to, and in many cases the only example of, Latin prose authors. Of the majority who preferred the military part of the film, some gave as a reason that it illustrated their texts better, and made their ideas about warfare clearer. One very thoughtful reason was that the Romans as fighters are of more importance to us, and that it shows their characters better. (Perhaps the reason that operated half-consciously with most was that in the battle part of the film there is more approach to continuity, and more activity.) One girl felt that *seeing* things signified by a word helps one to remember the word, and that this sort of visual lesson makes one think more about the Romans as living people. She also liked to see the Romans in Britain, feeling that their life and work there is of more interest to us than their work in Italy. The same pupil candidly admitted, also, that she remembered better what was not presented as a proper lesson! The criticism of the film was that ‘the battle was silly,’ and that there was too much marching, and that looked straggling. Some questions were asked, *e.g.* ‘Would they have thoroughbred horses?’ and ‘Would the horses not be protected by armour?’ There was no evidence that seeing a film makes children passively accept anything: those who question and criticise in class were still unwilling to accept what seemed peculiar. So they questioned the possibility of the camp being so carefully made every night—‘how had they time?’ and so on, and they wondered if the Romans would destroy the *agger* each morning before they marched on. The questions about the horses point in the same direction.

484. “**General Conclusion.** There can be no doubt, then, that there is much value for the teaching of Latin in films—particularly in putting life such as children can understand into dead bones. For the difficulties of the subject prevent all but a few from advancing far enough to feel that it is a language living through its literature, and lack of time with the present curriculum and examination system prevents one doing much in the teaching of Roman social history. The film could be most useful from the earliest stages—Roman houses, Roman towns, Roman dress, all that one takes so long to *tell* about, and that are so dryly pictured even on lantern slides for young people, would be immediately realised from a

film. The type of film that, from my talk with girls about those they saw, I gather to be most useful is discussed in the next section."

485. Criticism of Film. This teacher's criticism of the Roman Britain film has already been extracted for use in the general discussion of the film's merits and defects. It is she who makes the point that the film is an inharmonious mingling of the Boudicca story and typical scenes of Romano-British life; it should be either the one or the other. Having made this general criticism, she proceeds to minor matters:—

"Other minor objections are obvious, and some were raised by the pupils: the small number of Britons and Romans and the ridiculous inadequacy of the British defence; the display of chariots and cavalry seemed foolish because the armies looked so tiny. Again, it should not be possible for one pupil after another to say that the '*agmen* straggled.' The wedge formation, shield wall, and *testudo* were confused and too hurriedly done, and the number of men employed too small to give a really adequate picture. In the civil life section, it seems a pity that the picture the children get of a Roman who is not a soldier is the dandy, useful as he is in throwing new light on Roman character. And the *triclinium* scene, which would show excellently the Roman dining-room, is similarly spoiled. One wants to make the Romans live, and perhaps one should not conceal the foolish side of them, but it is a pity to make it so prominent without providing an antidote other than the soldier.

486. "Type of Film wanted. I have said that the film should be either a historical narrative, as accurate as it can possibly be made, with maps and so on, or merely typical scenes. I believe there is some value in the former, but it could be mainly for pupils studying Roman History in detail, and these would normally be so far advanced in school that the film, though it might be a pleasant way of summing up a series of lessons on, say, Boudicca's revolt, is of less value than it is to younger pupils. Moreover, the principal use of the film for the teaching of Latin seems to be to give 'background' and life, and this is best got, it seems to me, by merely typical scenes. But I think that detached scenes, however vivid and excellent in their detail, are dull for children, and not so easy to remember as a story. The League of Nations film was shown in our school just after the Roman Britain one, and many preferred the latter, though it is a much worse film from the teacher's point of view, because it had more life in it, and something resembling a story. It is the background one wants, but I think it must be brought in as the background to some story, even if the story is only rather a thin thread of narrative, for the sake of helping the children's memory and holding their interest. This is especially the case with younger children. Perhaps pupils of 14 and 15 would quite enjoy detached scenes, provided there was plenty of life in them, and for this purpose of the Latin class the order of the scenes is less important, but younger children (and I think first and second year classes ought to have this opportunity of interesting themselves in the life and

manners of the people whose language they are learning) perhaps need a story to stimulate interest and increase retentiveness. For the *Latin* class, then, social background films are wanted, I think—at least it is the background one wants to be learned ; dramatic incident films seem more useful in History, and, unfortunately, Ancient History is not as a rule taught concurrently with Ancient Language, so that the value of films in teaching it falls outside the scope of this report. And as it is background that is needed, maps and diagrams are of less use than pictures, although, again, if one could teach something of Roman History, the expansion of the empire could be excellently shown by maps like those in the League of Nations film.

487. “ **Practical Considerations.** I think that it would be necessary for the teacher to know her *film* thoroughly beforehand, apart from knowing her apparatus. She would then need always to be able to put the reels through the day before teaching from the film. Some sort of printed summary of the reel, like the descriptions issued with lantern slides, would also be useful. The apparatus used in the enquiry is much too heavy for moving about : it would then have to be fixed in a special lecture-room, or a lighter projector devised. The length suitable for one lesson would be one reel, I think, and that would contain as much material as could be readily assimilated at once. This 20 minutes’ picture would allow time for discussion and questioning after, while the picture is still fresh in the pupils’ memory.”

488. **Conclusion.** These reports scarcely need comment. It seems that the film can really help the child haltingly stumbling over Latin translation, by suggesting that the stories concern very real people, by relating words to objects, and by giving adequate background for his personal reconstruction of the scenes described.

489. **Interest of Tests in General Enquiry.** With regard to the general enquiry, perhaps the most interesting aspect of these tests is that four were taken with Fifth Forms, three of these being School Certificate Classes. The reports show that the film was of use to these older girls, one teacher definitely noting its value “ as a stimulus to discussion.”

CHAPTER XVI

THE FILM AND THE ADULT STUDENT

TRAINING COLLEGE : UNIVERSITY : WORKERS' EDUCATIONAL ASSOCIATION

490. **An Indication of a Further Line of Enquiry.** Tests with other than school children were entered upon more as an indication of a possible line of enquiry, as a very preliminary exploration of the field, than in the hope of arriving at conclusions. Time did not allow of sufficient work with adult students for that. Nothing was attempted beyond the discovery of the general opinion of the value of the medium in the classes concerned.

491. **The Questionnaire Used.** To this end the following questionnaire was used :—

FILM ENQUIRY QUESTIONNAIRE

Name..... Society.....

1. Do you think that films would help you in the study of history ?
Cross out the inapplicable word. Yes. No.
2. In what ways do you think films would be of assistance to you in the study of history ?
3. Do you consider that educational historical films should be
 - (a) mainly pictorial, or
 - (b) contain many moving maps and diagrams ?Cross out the inappropriate phrase.
4. What particular devices do you consider the most effective for historical films ?
5. What sort of historical subjects do you consider could be most usefully treated in films ? *E.g.* dramatic incidents, films giving social background, etc.
6. Please make any further remarks you care to regarding historical films and the adult student.

It was not easy to frame unambiguous questions, but in each case it was possible to explain orally to the classes the point it was desired to reach. Thus, in regard to Question 3 it is probable that any films for adults would contain maps, diagrams, and scenic matter; the question is merely which kind of material should predominate. Question 4 refers to the most effective type of animated diagram and map; for instance, is cross-hatching or entirely black shading preferable in an animated map? What is the value of animated numerals or blocks of relative size for the teaching of statistical points? Many such methods

are adopted in the League film, part or all of which was in all cases shown.

492. Experiment 113 : Answers to Questions 1 and 2. Success with the League film in the Upper Forms of Secondary Schools led to its showing to the students of a Women's Training College. It was shown in September to all the students, 108 first-year students newly up from Secondary Schools, and 90 students at the beginning of their second college year. All the League film was given, and the first reel of "Roman Britain" to illustrate a film of a more purely pictorial type than "The World War and After." The League film provoked applause, "Roman Britain" laughter. Actually, first and second year papers were separately analysed, but since there proved to be no essential differences between the two groups in the replies to Questions 1, 2, and 6, results are given for those points from the students as a whole. Of the 198 students, 195 felt that films would help them in their study of history. Of the three dissentients, two are first-year students. One of these thinks films could be useful "only in giving social background, because historical events cannot be filmed accurately." The other gives no reason for her negative. The second-year student writes, "Films would limit, I think, the imagination of the adult history student by being too definite."

493. Reservations made in stating the Value of the Film. A few students make reservations in declaring the value of the film for themselves. They feel that only modern scenes should be presented. This seems to be because they had been repelled by the unreality of the Roman Britain reel. "Films should show present-day events which can be taken from real happenings; ancient history on the film is not real." "The film is of very great value if it deals with modern or comparatively modern incidents. But to attempt to film a distant time such as Ancient Britain is not of great value, because we are apt to be amused rather than interested at attempts to reproduce men and matters which, when filmed, appear ludicrous rather than real." One student prefers her own imaginative pictures. "Films would only assist me in helping me to understand and picture the towns and countries of the present day. I should prefer to read history-books dealing with more ancient history rather than see a film which attempts to depict the life of that time. Half the appeal made by history to me is in trying to imagine for myself how the people lived in olden times. Films would spoil and probably disillusion me with regard to the pictures I had already formed in my mind, e.g. the film on Ancient Britain."

494. The Film makes History far more Real to the Students than before. Two impressions were uppermost in my mind after reading the answers to Question 2 on the reasons for the helpfulness of the film. The first was a depressing realisation of the number of girls who leave the Secondary Schools disliking history. It has never become a human

subject to them, but is envisaged, in the words of one student, "as a collection of dry-as-dust facts." The most constant reason advanced for the helpfulness of the film to the students themselves was its power to show history as the story of living people. "The films make one realise that history is a study of man and his neighbours rather than facts and figures in a history-book." "They make history not a matter of lists and dates but a real account of people who came before us." "It creates a great interest in the characters as people who have really lived; they are not just names attached to dates." "History becomes much more interesting and memorable to those who are not lovers of history. Actual incidents in history are brought home and are made credible." "Films make history a living thing, for without films it tends to become a subject of mere dates and isolated events." One student thinks that the film has both more interest and humour than lectures or books, and adds, "One rarely finds humour in a history-book!" 57 students say that the film is more realistic than other methods, 33 that it is more vivid, 34 that it is more interesting. Practically every student records the same fact in some way. Several students attach ultimate values to this greater sense of reality given by the film. "They assist in creating sympathy with people and things of the past." "Films would help me in the learning of history because they enlarge one's sympathies; they help one to sympathise more than a text-book does." "By giving interest in stories of the past and by making the past or affairs of other lands live to us, they help history to perform its proper function, *i.e.* to promote social imagination."

495. Appreciation of Films' Correlation of History and Geography. This leads to the second noteworthy point in the replies to Question 2, the students' appreciation of the film in relating history and geography, both by showing actual scenery and, through the maps, relative position. 50 remark on the advantage of seeing events in their proper setting, 54 of being given the geographical background. "The film gives a unity which should be the purpose of education, since it brings in many things beside those it actually aims at, *e.g.* geography." "Films give a more complete realisation of the connection of history and geography." "One of the main ways in which films would be of assistance in the teaching of history is by providing a sound geographical and social background for the story." This combination of scene and map is helpful. "The film gives a better idea of the different countries and their relationship with one another." They help "realisation of when and where the events took place, the relative significance of each country, the effect of its history on other countries, and they arouse sympathy for other peoples." Several make this point of the possibilities latent in the film of showing events in their international aspects, and so of creating an international outlook.

496. The Value of the Animated Map. The effectiveness of the maps for actual learning of fact receives much comment. "The maps are a

great help, and the shading of the countries is impressive and more striking than a stationary map." "Such maps and diagrams as were shown in the League film are helpful because of their clearness and simplicity." "History depends so much on geography that maps and diagrams are essential. In a film such as the one presented, the maps and diagrams appear more vivid and therefore of more value. The countries are shown so clearly that the situation of events is easily understood." "A history-book map does not leap to your mind like a map presented on the film."

497. Dangers Inherent in Use of the Animated Map. Three comments show the dangers inherent in the use of animated maps. "A limited number of maps are essential if an accurate idea of places is required, but films containing too many maps and diagrams tend to confuse one." "It is not easy to grasp the significance of the maps in the historical films, as they follow one another too quickly." "Films containing maps would help to impress facts on students, but they would not teach the facts."

498. Presentation of Statistics. Pictorial representation of statistics was almost as much appreciated. The diagrams "give a meaning to statistics." Such phrases recur. "The diagrams and statistics, which, when printed, seem so uninteresting and worthy of only a glance, become real and full of significance when shown on the films in such a manner as occurs in 'The World War and After.'" Again, one student feels differently: "People do not want too many statistics. £70,000,000 does not convey anything to the average adult."

499. The Film gives Coherence to Wide Topics. A third, though somewhat less marked, feature of these answers was the students' realisation of the value of the film in showing the connection between a series of events. "Films help to give the idea of history growing out of itself and not being merely a string of incidents concerning heroes." "Films give you main facts and a broad outlook and touch all points of view in a short time." "In films the sequence of events can be better understood." One student remarks: "By the use of maps and diagrams difficult political situations are driven home." Another: "They also serve as a connecting link between social and political history." Similar remarks are: "Films give a connected and coherent picture." "Films connect facts together more clearly." "After having a course of lessons on a certain subject or reading round it widely, to see a film would make a clearer impression and help to fix the knowledge gained in the mind. It would gather together the important and outstanding facts or events and leave one with a definite idea of the subject which has been studied." Many feel that the film can give a broad view of historical subjects. "By the film every possible aspect of the subject, especially the difficult ones, such as statistics, visualisation of countries, etc., were made much clearer and far easier to understand." "It is possible that these films will present events in a new light and enable the student to view world history from fresh stand-

points and so create a wider outlook on the world as a whole." It is evident that these students regard the film treatment as the reverse of shallow or episodic.

500. Other Advantages. Many other points are made, which must be treated briefly. The film gives an impression known to be correct, and "a clear and definite picture" instead of those "blurred and imaginary." It is remembered because of its impressiveness. Since the film quickly covers a great amount of ground, it is useful for revision. It creates the right "atmosphere" for past events. It provides an interesting variant. Learning is "less fatiguing" and "more pleasurable." Visualisation is helped. It is noteworthy that 3 think it will "limit" the imagination, 10 that it "aids" and 14 that it "stimulates" the imagination. One says, "Films might tend to overstimulate the imagination."

501. Value of Film to Intending Teachers. Three, second-year students think of the value of the film to themselves as future teachers. "Pictorial historical films, if carefully prepared, would be of great value to students and would help them enormously in teaching children. These films give one the atmosphere of the time and the sense of the duration of time which text-books fail often to give." "Films could be of great use to students who are to be teachers and have no means of travelling and hence can only give knowledge from stories and text-books. They would help to overcome the difficulty of presenting false material to the child." "Films give the student a clearer conception of the incident or incidents and so make it easier for the student to transmit the facts to others."

502. Answers to Question 3. In view of the two chief reasons given for the helpfulness of the films, actuality and the relation of incident to place, it is not surprising that in answering Question 3, the students are fairly evenly divided between those who prefer the diagrammatic and those who like the more purely pictorial film. The figures are :—

	1st Year.	2nd Year.	Totals.
The largely diagrammatic film	55	39	94
The mainly pictorial film	44	44	88
Both types, according to subject	5	3	8
No answer	4	4	8

503. Answers to Question 4. In answering Question 4, many students begged the question, simply saying "Animated maps and diagrams" instead of giving some indication of the particular type of map which was most effective. Tabulated results of the more exact replies follow :—

	1st Year.	2nd Year.
Darkened map of World War	23	14
Analogies	14	6
Shooting lines	4	2
Animated numerals	2	3

	1st Year.	2nd Year.
John Bull : Relative sizes for statistics	2	0
Clock device	1	3
Cross-hatched maps	1	2
Constant repetition	1	3
Routes by moving dotted line		1
Labels on maps		1
Narrative form desirable		4

504. **Answers to Question 5.** Most students felt that a great variety of subjects could usefully be treated in the film, both social life and actual political events. The analysis of replies gives :—

	1st Year.	2nd Year.	Totals.
Films on Social life	14	19	33
Films on actual events	37	3	40
All types	50	63	113
No answer	7	5	12

Probably the special circumstances affected the replies. The students, no doubt, had in mind not only the sort of film that would help them to learn history, but also those that would help them in their teaching ; it would be an advantage to see on the film the stories they would later tell the children.

505. **Answers to Question 6.** Question 6 elicited further elaborations of personal opinion, but few new points were made. "I think that historical films should be dramatic. One could gain more useful and lasting knowledge from a good lecture followed by reading than from the League of Nations picture." "Historical films are a great help at the end of a lecture to make one memorise history." "Films give no general outline of history, which is, after all, what the adult student needs most. Nevertheless, they transform what is usually classed as a dry subject into a wonderful story."

506. **Criticism of Films.** Pertinent comments on the particular films and on film construction in general were also provoked. "Roman Britain" was freely criticised as unreal ; a few considered the League film too long. "It does not appear to me useful to include much data, as this, if it is to be absorbed, must be done so by repetition." A few constructive suggestions were made. "The films should be clear, concise, and to the point. Unnecessary scenes should be avoided." "The film should be more of a complete whole than a series of incidents." "The subject matter of the film should aim at containing material which cannot be found in books."

507. **General Conclusions: Experiment 113.** The test confirmed the view (a) of the attractiveness of the animated diagram and map for older students, while suggesting that there is no need for the exclusion of the pictorial element, and (b) of the suitability of the film method for

Senior scholars in Secondary Schools and for students, given the proper film. It is indubitable that the students appreciated the League film as an illuminative treatment of a wide and difficult subject.

508. Experiment 114. Many of the Training College students took History as part of their college course, but as one subject amongst others. The question remained whether the film was likely to be of any use to more advanced students of history. Consequently, the League film and Reel II. of "Wolfe" was shown to the Historical Society of a local University, and the members of the History School invited to give their impressions of the value of the method for themselves. Insufficient replies were, however, received for the views expressed to be quoted as representative, though all remarked on the value of the animated map for illustrating the course of a campaign, treaty changes, and the like. It is questionable to what the paucity of response was due—to profound contempt for the whole idea that films might possibly be of assistance to so advanced a group, or merely to negligence of an entirely optional task.

509. Experiment 115: General Value of the Film. The two final experiments attacked the problem of the value of the film to the average adult evening class, to the members of W.E.A. classes, the extra-mural classes of Universities, and the like, people with little formal knowledge of history at the commencement of their evening work, and little training in habits of study. The League film and the second reel of the Wolfe film were shown to a W.E.A. class in a small industrial town in Yorkshire. The object of the meeting was briefly explained before the projection of the films. Immediately after the showing, the class was invited to fill in the question papers. 15 minutes was allowed for this. Then the papers were collected and discussion followed, this having been postponed that the papers might reflect the spontaneous opinion of each individual. 70 people were present. Only 29 returned papers. All the writers were convinced of the value of the film for such classes. They think the film gives a clearer notion than books, so that the impression will the longer remain. Three write that they have a better visual than auditory memory. One says, "Thousands learn more quickly by demonstration than by either word or print." They are interested in the geographical aspect of the film. Such films will be useful "in helping one to realise the surroundings of incidents and the difficulties." Here, again, there is a feeling that for adults fairly recent and contemporary history might be portrayed. "For adults, the film should show important political, religious, and social happenings of the day."

510. Answers to Question 3. 22 people answered Question 3. The figures were :—

The largely diagrammatic film	10
The mainly pictorial film	2
Both types, according to subject	10

511. **Answers to Question 4.** Only 4 felt competent to give an opinion on the relative effectiveness of the devices used. The results were :—

The darkened map of World War	2
Shooting lines	3
Stopping the film	1

512. **Answers to Question 5.** For replies to Question 5, the analysis was :—

Films on social life	15
Films on actual events	1
All types	8

513. **Answers to Question 6.** Under Question 6, two suggest that the films should be shown more slowly. " Films place the scene more vividly than word pictures, but they need to be slowed down considerably if they are to drive home the salient points. There is far too much to grasp in what we have seen to-night, particularly for one who knew nothing of the subject before. Such films will be more useful for revision of work than for teaching from the outset."

514. **The Discussion.** Discussion was somewhat desultory, though the feeling of the meeting was decidedly in favour of the helpfulness of the film. More was said after the meeting had been formally declared closed and members of the class gathered round the projector. Two points were raised similar to those raised by the Training College students. In the first place, one member pointed out that reconstruction of past scenes must be extremely well done to satisfy the adult. The Wolfe reel struck her as humorous and unreal ; the soldiers looked spick and span ; nobody looked anguished ; it was obviously artificial and therefore a pity for it to be shown. The value of the film in making the affairs of other countries less remote was also remarked, one member saying : " When I read the newspaper, I pass over Balkan disputes. They 're always having them, and they usually don't affect me. When I saw the film, I began to feel that I ought to bother more about what was happening to these people." The film induces in the adult, too, that sympathetic insight into the lives and problems of others that history should train.

515. **Experiment 116: General Value of the Film.** The last experiment proved extremely interesting. The League film was shown to 50 students of a W.E.A. group in an industrial city. The papers were filled in, as before, immediately after the completion of the film ; they were enlightening. 36 members gave in papers ; 35 felt the film would prove of decided help ; the solitary opposer explained that he was very short-sighted. The expressions of approbation on the film were frequently enthusiastic and very varied. They turned on this power of the film to

invest distant happenings with meaning. It is proposed to give fairly full quotations. The film is helpful—

(1) "By removing what may sometimes appear to be a sense of unreality and remoteness concerning historical episodes. By making one realise that we are living a piece of history ourselves, and by showing our interrelation to the whole social and historical fabric. By proving to one that human nature is pretty much the same the world over and that other people have their loves and hates and difficulties and points of view."

(2) "Films would make things more vivid and clearer. The life of people in different ages and different countries would be more intelligible and one would be able to see how events affected ordinary people and not only statesmen and rulers. This would make things seem of real moment to everybody, and so should make people take a keener interest in present-day problems and ways of solving them and enable them to use their vote to some purpose."

(3) "The film would be of assistance:—To make the unfamiliar familiar, *e.g.* reduce disputes to realities, *e.g.* the street fight and the Serajevo murder. To encourage impartiality—by showing exactly parallel cases of war refugees in all countries. To visualise social conditions in other countries or in our country at earlier periods of time. To keep events in perspective—there is a world elsewhere—destroy insularity and prejudice. To face minds with stark realities—the blind soldiers, war graves, destruction, etc. To point the fact that 'folks are folks'—the Aaland Islands as a moral fact and as a political row."

(4) "Films would make everything in the past be really a part of the present. One is apt to regard things which happened years ago to be finished and to have little connection with life to-day. Seeing people in past times actually going about their work and doing everyday things makes them more human, and one is able to realise how different laws gradually changed their lives. Certain figures and events stand out in history as isolated people or facts. Films would show them in true relation to their period, and a better judgment could be formed of their value. Important but undramatic events could be shown as sowing the seed of later events. Foreign affairs become more interesting when one has seen the people of those lands in circumstances akin to one's own."

516. Combination of History and Geography. Again, it is noticeable that the members of this class are impressed by the combination of history and geography. Interest is aroused in people of other lands as well as of other times. "Pictorial illustration gives one a much clearer idea of other countries' architecture and dress, and also creates atmosphere. Maps shown on the screen give a more vivid impression of location and area occupied by various nations." "The flash map at the beginning of the League of Nations film showing the extent of the war and the nations concerned was a revelation." "The hatched diagrams and growing black

shading are exceedingly good in helping the average person, child or adult, to grasp the significance of territorial changes." "A film with a geographical setting gives substance or reality to places of historical interest; hence the appeal becomes wider and deeper. The maps are very useful for enabling one to fix the position of the places in question."

517. Presentation of Statistics. The presentation of statistical facts appealed to this group. "The diagrams help in the understanding of statistical reports. Reading masses of figures from a book is apt to leave one with very vague ideas as to what are the facts which the figures are intended to convey." "Tedious details of, *e.g.*, balance sheets, are made interesting and more easily understood."

518. Miscellaneous Points. The film's value as a résumé and grouping of the partially known is stressed. "Films are useful as a revision of a period in which a series of events needs to be linked into a whole." "They serve as a means of driving home facts with which we are already acquainted, and so help the memory. To most people, pictures are more interesting than words, and the impression is deeper." Two people express the following view: "After a day's work the film is easier to grasp than the ordinary text-book if one is fatigued." One member writes: "The study of history would be speeded up." Another explains: "The adult student's brain is not fresh when he starts his work, and also he is often working against time. Many points that would take hours of study alone or perhaps much of a teacher's time could be shown on the films and be instantly grasped by an adult student. Many an adult student who wishes to take a course in Modern History is handicapped by his lack of knowledge of the past, but does not wish to spend a long time in studying this. A short course by means of the film would bring the past and its lessons before his mind in an attractive and effective way." Further, "they help out the imagination by making general reading seem more particular." One student points out a fresh aspect of the relation of the film and imagination. "Constant reading may tend to dull the imagination. We see things through a maze of words. The pros and cons of Serajevo are interminable—the fact is a stupidity followed by a crime."

519. Answers to Question 3. Again, the members' appreciation of the value of the map and diagram appears in the answers to Question 3.

The largely diagrammatic film	21
The mainly pictorial film	3
Both, according to subject	10
No reply	2

One student seems to express the general view when he says that the film should be mainly diagrammatic with some pictorial scenes for "leaven."

520. **Answers to Question 4.** 20 replied to the question on the most effective devices, as follows :—

Darkened map of World War	16
Cross-hatched map	10
Shooting lines	2
Animated diagrams	2
Statistical diagrams (relative sizes)	2
Analogies	2
Have short films	1

521. **Answers to Question 5.** 35 replied to Question 5 :—

Films on social life	10
Actual events	2
All types	23

The opinions expressed in the last answers obviously depended on the balancing of two ideas in the minds of the class. Their predilections, as in many W.E.A. groups, are for Social History, but they have realised from the League film the value of the cinema in showing the interconnection of political events and the interdependence of nations. Hence, replies after this nature are given : “ Social background and complicated political events to make clear their connection, as in the League film.”

522. **Answers to Question 6.** Question 6 drew forth interesting observations, mostly on the type of film. Some comments are : “ Almost anything filmed would be clearer.” “ Might I suggest historical films to interest adults could range round industries, showing the development of an industry from its inception and giving some details of the work which has been put in both by employer and employed to make the industry what it has come to.” “ We need films that do not work on one’s emotions, so that intellect is not dominated by them.” “ I consider that historical films will probably prove themselves of even higher value to adult students than to children, as the adult student will in most cases have assimilated a fair amount of book knowledge on the subject. The film shown to-night made me realise as never before from mere reading, and seeing occasional British and American war films, the real meaning of the World War. Never before have I realised how little of the whole world was not involved at some time or another in the great struggle. Of course, the pictorial representation needs elucidating by a good deal of book work and ordinary lecturing and so forth, but, nevertheless, the film will, I think, prove invaluable in causing the dry bones of history to come together to form a really living picture.” “ Films for adult students should try to avoid the conventional presentation of history and afford food for discussion.” “ The film’s main object should be to put history in a way in which it cannot be forgotten. Therefore, too much should not be attempted in each film and a thorough discussion should take place.” “ I think that to make problems pictorial they have to be

simplified somewhat, and that this simplification might be misleading—but the advantages exceed, I think, the danger of simplification, if it is one. Films might be made by propagandists, but this also applies to books.” “The lecturer to-night was careful to point out that the League of Nations film was prepared originally for children, but I feel that it was not too elementary for most adults, and to my mind it is a great danger to assume that people know too much, especially about history. I cannot help but feel after what I have seen to-night that the film can be a splendid medium in education. Impartiality is most important and simplicity.” “War is really an impossible subject to depict in film form—atmosphere cannot be achieved.” “The tutor or any student should be at liberty to stop the display at any point desired for the purpose of elucidating, emphasising, or questioning points.”

523. **The Discussion.** After the papers had been collected, a keen discussion was carried on for 45 minutes. Few points not already mentioned in reviewing the papers were, however, made. The League film itself was criticised as being “good propaganda but bad history,” on such familiar grounds as that the murder of the Archduke Francis Ferdinand was presented as the cause of war (this defect has now been remedied); and that the garden dispute was a false analogy, the settlement being too simple. Two members felt that biographical films would be helpful; when a class was studying a subject from books, biographical sketches of the leading people concerned might be shown on the film, to make these persons more than names and to give colour to the whole period. The difficulty of selecting subjects so as to avoid injury to the students’ sense of historical perspective and proportion was mooted. “If we film a few things, shouldn’t we have to film everything?” There was a general feeling that films would need far more careful editing than text-books, for the former possessed a more compelling appeal. The remark of one member appropriately summarises the final conclusion of the meeting: “I think that, in the hands of capable people and given at a proper time, there is not a doubt but that films would be helpful.”

524. **Summary: Experiments 115 and 116.** Though, as was said above, general conclusions on the value of the film for adult classes cannot be founded on so few tests as these, there is certainly a suggestion that the film might be of more than a little assistance. Films for such purposes should be simple and not too long, containing an admixture of pictorial scenes with maps and diagrammatic matter; in this connection the spread of dark shading and the shooting line or arrow were considered the most effective of the devices used. It would seem that films on social and industrial life, or those of the League type, dealing with a series of inter-connected events, particularly those of international concern, might help to give reality and coherence to the subjects studied.

CHAPTER XVII

SUMMARY OF CONCLUSIONS ON THE VALUE OF THE CLASSROOM FILM FOR TEACHING HISTORY, AFTER INVESTIGATION IN VARIOUS TYPES OF SCHOOL, ETC., WITH SIX AVOWEDLY EXPERIMENTAL FILMS

1. Type of Evidence. Evidence must be secured from the personal investigation of an enquirer, from practical teachers of all types, and from the children, students, etc., to whom the films are shown. (18, 119, 122, 123, 490, 491.)

2. Judgment on the Value of the Historical Teaching Film. Judgment on the value of the historical teaching film must necessarily vary with the conception of the aims with which history is taught. (Chapter II., 252.)

3. Attitude of Teachers towards the Use of the Film in the Classroom. A remarkable change in attitude was noticed among teachers who took part in the enquiry and saw the results obtained in follow-up lessons. (124, 214, 252 ; Appendix D, 7 ; Appendix E, 12.)

4. General Effect of the Historical Teaching Film.

(a) It gives life to the past as nothing else does by

(i) portraying life in movement. (218-20.)

(ii) giving a background with full detail. (215-17, 316, 320 ; Appendix D, 4.)

(b) It arouses interest that stimulates the children to further mental effort ; this is shown in their readiness to ask questions, in desire for books, and in other forms of self-activity. It is a fallacy that the historical teaching film encourages mental passivity. The interest aroused seems to be permanent. (227, 231, 233, 234, 278, 292 ; Appendix D, 3, 7-11 ; Appendix E, 4, 5.)

(c) It stimulates imagination. The children realise the past, gain some sympathetic insight into the lives and feelings of the men and women of the past, and get a fuller and clearer picture of the environment ; thus, they can the better imaginatively reconstruct for themselves other scenes of the same period as those seen on the films. (204, 221-3 ; Appendix C ; Appendix E, 7.)

(d) It helps children to assimilate ; they gain both in grip and atmosphere. (212 ; cf. quoted reports and analysis of marks, *passim*, e.g. 202.)

(e) It helps children to remember, judging by the results of the delayed tests. (213; Appendix D, 3; cf. quoted reports and analysis of marks, *passim*, e.g. 162, 207.)

(f) It forces children to find their own words to express opinions and describe scenes, not merely to borrow those of the teacher or text-book. (162, 235.)

(g) It presents a point of view to the children in addition to that of the teacher and the text-book. (162, 249.)

(h) It affords pleasure to the children, not merely because it is a change from ordinary routine. Hence, it tends to lead children both to enjoy history more and to desire a better type of film. (232, 314; cf. 127, 179; Appendix E, 11.)

5. Value for Audiences of Various Types and Ages.

(a) *Junior Schools.* Children below the age of 9+ derive less advantage from the use of historical films than from oral lessons. (Chapter X., especially 254-60, 262.)

Children of 9 to 11 like and respond well to the film, but a need for the historical teaching film in the Junior School has not been established. (74, 184-7, 192-3, 261, 263-4.)

	Informal.	Formal.
No. of Experiments with children of Junior School age	11	10

(b) *Senior Schools.* The film is peculiarly valuable in this type of school (126-43). This is especially true of schools in poor districts in towns (Chapter VII., 219, 238), and in rural schools, where opportunities are restricted in certain directions. (Chapter VIII., especially 182, 189, 209; Appendix D, 5).

	Informal.	Formal.
No. of Experiments with children in schools of Senior School type	18	13
No. of Experiments with children in schools in Poor Districts	22	
No. of Experiments with children in Rural Schools—		
6 with Senior scholars	8	
2 with Junior scholars		

(c) *Secondary Schools.* Even in Secondary Schools with their academic bias the film is useful. In the Upper Classes the film serves for revision, as a basis of discussion, and for critical appreciation, historical and aesthetic. (Chapters XI.-XII., 289-93, 300, 308-9, 321, 324-5.)

	Informal.	Formal.
No. of Experiments in Secondary Schools—		
History	46	15
Latin	5	

(d) *Training Colleges.* The one experiment carried out in a Training College produced striking results. For intending teachers of history,

particularly for the non-specialist, the historical teaching film might be of the greatest value. (491-507.)

(e) *Adult Classes.* The few experiments carried out show that adult students might find the historical teaching film valuable in a variety of ways. Further enquiry appears desirable. (509-23.)

6. Effect on the Backward and the Apt Pupil.

(a) Many backward children noticeably profit by the historical teaching film ; they take more part in oral lessons, show a greater grip of fact and sense of atmosphere in essays after the films, and remember more than usual. (237-8 ; cf. quoted reports and analysis of marks, 129, 132, 145, 156, 158, 163, 281, *et passim.*)

(b) On the other hand, some children usually near the top of the class do less well after seeing a film than after the ordinary type of lesson. (239-40 ; cf. quoted reports and analysis of marks, 138, 164, 165, 271, *et passim.*)

7. **Value of Historical Films for Language Teaching.** A few experiments tried with Latin classes seem to show that the interest in learning the Latin language could be increased by a film which made real and living the peoples of another civilisation and otherwise gave significance to what often seems to remain mere words. There is room for experiment with films specially constructed for this purpose in the teaching of both classical and modern languages. (Chapter XV., 5 tests.)

8. The Technique of using the Historical Teaching Film with a Class.

(a) The teacher should see the film beforehand ; he should also be provided with a synopsis of its contents, and know what he expects the children to learn from it. He can then briefly induce the right atmosphere by a few, preparatory words. (246, 249 ; cf. 184.)

(b) Occasional, oral comments are useful during the showing of the film, particularly to direct attention to inanimate things, but such comments should remain subordinate to the film. As the quality of the films improve, the necessity for comment may disappear. (205, 245-6, 328, 338 ; cf. 154, 259.)

(c) Occasionally, the film may be stopped to emphasise some important point or to examine detail, especially when the film is not well constructed. It is better to study a new topic by usual methods and to show the film with few or no stops, than to spend time in giving the film with frequent interruptions for explanation. (90, 96, 247-8.)

(d) When the film has been shown, the children should be encouraged to ask questions and start a general discussion ; this serves to help the children to organise the new information gained, to allow for correction of misapprehensions, to satisfy the curiosity aroused and give vent to the interest created, in fact, to make the knowledge gained from the film a more permanent possession of the child from the exercise of his thought

upon it. Without this follow-up discussion, the historical teaching film loses a very great part, if not all, of its value, as a teaching medium in the classroom. (224, 229-33, 326.)

(e) Some teachers recommend showing the film twice to backward children, but if time is short, it is better to spend time in discussion than to show the film twice. (96 (c).)

(f) The historical teaching film can be used either as introduction or during the course of the study of a topic or for purposes of revision. (241-4, 327 ; Appendix E, 10.)

9. Conditions for Successful Showing. Unless the apparatus used is simple and light, the historical teaching film should be shown in a special room where the apparatus is fixed. In such a room, particular attention should be paid to the complete exclusion of light and to ventilation. Each child should have a clear and undistorted view. The larger the picture and the more silent the machine the better. (464-8 ; Appendix D, 18-19 ; Appendix E, 16.)

10. Type of Film required.

(a) The quality of the photography should be reasonably good. Children do not expect in school the standard of the super-film. (440 ; cf. 153, 170.)

(b) One reel, or at the most two reels, are the most suitable for teaching purposes. (426 ; Appendix D, 16-17 ; Appendix E, 13.)

(c) The film must be an artistic whole, not a mere collection of cuts lacking in logical sequence. (339-46, 427-8, 139 ; Appendix E, 15.)

(d) The film should consist mainly of scenes of actual life, maps and diagrammatic matter being subordinate to these. (388, 408-9, 429.)

(e) The reproduction of historical atmosphere is of the first importance ; as complete accuracy as possible should be achieved in archaeological detail. Battles and other scenes where it is almost impossible to obtain an effect of reality, should be avoided. (378-9, 437-8.)

(f) The utmost care is necessary if well-known historical characters are introduced. Close-ups of such persons are unconvincing. (319, 383, 389, 391, 420, 439.)

(g) Modern and ancient people should not be portrayed in the same reel. The dull child is confused, and all pay most attention to their contemporaries. (61, 350, 354, 432.)

(h) The presentation of the material should be direct ; children below the age of 13½ years do not readily understand analogies presented on the screen. (137, 177, 396.)

(i) One or two animated maps are valuable additions to a film, combining, with the showing of natural scenery, to give that geographical background for events which is often not clearly realised by children, and serving to break down the artificial barrier so harmfully erected in the children's minds between the closely allied subjects of history and geography. (138, 406, 410, 495-6.)

(j) Experiment is needed in the preparation of various types of teaching film. The majority of teachers prefer films on social life, but many feel that events of vital, historical importance could advantageously be shown on the screen. There is scope with younger children for the biographical film, and for the film with a child as the central character. The topical budget might also be used. In the Upper Forms of Secondary Schools the predominantly diagrammatic film would seem to be valuable. It would be a mistake to film the historical novel for purposes of history teaching. The tests have shown that interest centres on action rather than on setting; in such films, therefore, children would concentrate on the plot, which would have no real, historical significance. Similarly, the expensive spectacular film is not likely to prove of value for this purpose. Films can deal with causal relationships, ideas, and motives, cf. the League of Nations film. They need be neither episodic nor concerned merely with concrete detail and the lighter side of history. To sum up, the film should provide scenes arranged in a definite sequence and selected for the definite purpose of history teaching. (Chapter XIII., especially 441; 323, 324, 332-7, 400-1, 408-25, 460-3; Appendix D, 12, 15; Appendix E, 5.)

11. The Production of the Historical Teaching Film.

(a) The school film can be satisfactorily produced only through the co-operation of practical teacher, historical expert, and professional producer, these contributing severally acquaintance with the needs of the child, scholarship, and technical knowledge. (376, 443.)

(b) Sincerity and simplicity should be the keynote of the production. (332-7, 368-9, 437; Appendix D, 14.)

(c) The scenes should not be overcrowded, nor sub-titles difficult and long. There should be no such resemblance between scenes as might lead to confusion. (190, 373, 379, 434-6.)

(d) Each scene should remain sufficiently long on the screen, when the film is shown at its normal pace, for the children clearly to realise the significance not only of action but of surroundings, buildings, dress, etc. (257-9, 353, 367, 430.)

(e) Maps and diagrams should be bold and of the animated type; few should be shown in films intended for general school use. (167, 380, 407 (6), 409-10, 431, 497.)

(f) It is not suggested that experiments in the production of this type of film are at the present time likely to provide adequate financial returns to the producer. The use of the same films throughout the English-speaking portions of the Empire would obviously increase the market.

APPENDIX A

DETAILED ACCOUNT OF THE SUBJECT MATTER OF THE FILMS USED

1. **"People of the Axe."** **Production.** "People of the Axe" is a short, one-reel film acted by the boys of the Altrincham County High School. It gives a picture of life in the New Stone Age.

2. **Sources suggested : Immigration.** The film opens with the title, "The Professor digs," and shows a Professor of Archaeology and schoolboys of to-day excavating a long barrow on a hillside. A skull is found and examined, and "an axe-head of polished stone." Follows the caption, "The Professor's Story." The Professor talks to the boys, who listen closely. Then we read, "More than six thousand years ago they came across the Channel," and see men paddling dug-out canoes arriving on the coast. "For centuries they wandered over the hill-tops, tending their flocks and hunting." A Stone Age family clad in skins slowly advances across the skyline of a hill. The leader, staff in hand, leads a horse. They drive with them a few goats and sheep.

3. **Occupations of the New Stone Age.** Next comes the story of the boy, Fleet, first seen asleep, apparently at one side of a pit dwelling. He wakes, yawns, and is then seen creeping out of the low entry of the hut, the exterior of which is plainly shown. He climbs the rough stockade of the village and runs down the hillside to a pool in the wooded valley. He drinks, looks up, and listens. "There were bears in the forest in those days." A bear is seen amongst the tree branches, and Fleet creeps cautiously away. "Sometimes Fleet would visit the flint-mines." He watches two men engaged in surface-mining with antler pick and bone shovels, and picks up a flint. "Or inspect the deer-traps." He examines a trap of loosely interwoven branches laid on the ground, whether over a pit or no is not very clear. "He would often go down to the sea for shellfish." Fleet looks for shellfish in shallow pools and sits and eats them upon the rocks. He then returns to the village, of which first a general view is given. "They were busy folk up at the village." Close-up scenes of people engaged in various occupations follow. "They tended sheep"—a flock of sheep is driven within the stockade. "They shaped weapons from flint"—a man chips flint weapons. "And polished them"—he polishes an axe-head against a large stone and tries its fit in a wooden shaft. "They scraped skins"—two children scrape a skin stretched on the ground. "And sewed garments"—a woman sews a skin with a bone needle. "They made pottery"—a woman moulds a clay pot. "And baskets"—another weaves a basket of willow. "They even wove rough cloth"—two people operate a primitive loom. "One day a pedlar of flints came to the village." The pedlar raps at the stockade. Boys see who it is, and tell the news. The villagers flock to welcome the pedlar. He becomes the centre of an excited group, who watch him open his bag and display spear-heads and arrow-heads. Fleet's father offers skins to the pedlar; one is rejected in exchange for an axe-head; another is added to it to effect an exchange—"Fleet's father bought a fine axe-stone."

The exchange is made. "And Fleet bought an arrow-head." The pedlar accepts, after some examination, the tooth necklace that Fleet wore, giving him the arrow-head.

4. **Hunting Scenes.** Fleet is then seen alone outside the hut with a straight, slender branch for arrow-shaft. He cuts a notch at the top, inserts the arrow-head, and binds it to the shaft with sinews. "So Fleet went hunting the deer." Fleet is in the woodland, equipped with bow and arrow. He stalks a herd of deer, and finally climbs a tree and shoots. "This was his first kill." The villagers crowd round Fleet on his arrival home. "The meat was soon cooking" — a fire of bracken and wood on an outside, stone hearth is seen, the meat suspended on a raised horizontal branch and tended by a woman. "Fleet told a fine tale that night." Fleet is seen standing in the firelight telling his story with gusto. This fades into the title "So Fleet became a mighty hunter," when the Professor and boys are shown again, "and perhaps this is one of his axe-heads." The boys look interestedly at the flint, and the reel ends.

5. **"People of the Lake."** A Scout visits a Lake Village. This is a somewhat longer reel, dealing with the Bronze Age. Under the caption "Scout Brown was fond of archaeology, anthropology, ethnology, and——" a Scout is shown reading a history-book and drinking ginger beer amongst the sand dunes on a summer's afternoon. He goes to sleep and wakens to find a man in tunic and horned helmet, armed with a round shield, hurling a spear at him from the top of a neighbouring dune. A second spear follows. The Scout interestedly examines its leaf-shaped head, then rises to confront his enemy, who, however, has disappeared. Book under arm, the Scout walks across the sand and finds himself on the shores of a lake. On an island in the middle of the lake is a settlement. The Scout sees that it is like the picture of primitive lake dwellings shown in his book. As he looks, all is alarm in the village. Who is this stranger? A tall warrior puts out from the village jetty and paddles across the lake. This time the paddle is carefully shaped, the canoe made with pointed prow. The warrior reaches the shore, and, cape flying in the breeze, stealthily advances on the Scout, feeling the edge of his socketed axe. The Scout finds his axe; the two weapons are compared by alternate appearance on the screen. Just as the warrior seems about to cleave the Scout's skull, Brown blows a shrill blast on his Scout whistle. The Bronze man, terrified, kneels before him. Then "Scout Brown investigates." The warrior and Scout paddle back to the village. The villagers curiously gather around them at the landing-stage, some wearing leather, some skins, and some cloth garments. The Scout is taken between the huts to the Chief, who inquisitively examines the boy's garments. The Scout, seeing the Chief's interest in his hat, hands it to him. The Chief dons it, and struts up and down in pride. Friendship being established, the two sit down outside a hut and each continues his examination of the curious equipment of the other. The Scout examines a Bronze Age dagger, the Chief the Scout's knife. "The Chief was a good Scout, but he hadn't passed all his tests." He cut himself on the sharp blade and had to be bandaged up by the boy. Meantime, a boy of the village picks up the Scout's book, wonderingly examines it, apparently upside down, and steals away with this new treasure. The Scout retrieves his property by lassoing the child in the midst of the laughing tribesmen.

6. **The People at Work.** Then follows "A tour of inspection." The Chief takes the Scout to see the strong stockade and points to the protective water. Again, villagers are seen weaving, spinning with distaff and spindle, and making

pottery ornamented with straight-line patterns. The Scout peers inside the smith's hut. In the firelight, he is shown making a spear-head with a bone for a hammer. Round him are placed shields, swords, and other weapons. Returning to the centre of the village, the Scout takes out a box of Swan Vestas; a close-up is shown. When he strikes a match, the villagers in awe salute him with raised spears, "Hail to the God of Fire."

7. Warfare in the Bronze Age. Then comes a shout from the sentinel at the stockade, "An enemy." A warrior appears silhouetted alone on the crest of a neighbouring hill. He winds his bugle, and beside him stand his clan. "The hill tribes are on the warpath." In the village, hurried preparations are made. The men run to the fencing. The enemy rush down the slope, wade through the water, attack the stockade. The Scout, at the fence, waves on the villagers to the defence. A breach is made, but the Scout fells the invaders as they push through one by one. His axe is wrested from him, he is driven to bay between hut and stockade, a spear about to pierce him. At the crucial moment he awakes, to find fellow-Scouts prodding him with Scout poles.

8. "Roman Britain," Reel I. General Village Life. This film, a series of cuts from the picture-house film "Boadicea," was produced for school use by British Instructional Films Ltd. Reel I. is entitled "The Britons at Peace." The first sub-title runs, "When the Romans came to Britain in A.D. 49, they found the Britons living in villages of mud huts thatched with reeds." A long shot of an almost deserted village is shown, round huts grouped around the rectangular house of the Chief, the settlement fenced by a stockade. "At the approach of danger all the villagers rushed within the palings and the gates were shut." Two women are approaching the village carrying baskets full of ears of grain. A man comes running from behind, pointing excitedly outward. They all rush inside the gate, where other people are calling to them, and the gates are closed. "The Britons were a corn-growing people. It was partly the rich harvests of the Britons which tempted the Romans." In the cornfield, men in loose tunics and long baggy trousers are cutting the corn with curved iron sickles. Women are gathering the grain into baskets. "The Britons got food in another way." A man warily advances through a forest. He sights a wild boar, of which a fearsome close-up is shown, and hurls his spear. Other occupations are then pictured. The title, "The Britons were highly skilled in such primitive arts as basket-making," precedes a close-up of a basket-maker working at a half-made willow basket, and that of "and pottery-making" is before a close-up of a potter. He rolls the clay into spirals, coils them one above the other, then smooths out with his hands the inside of the bowl.

9. Life and Government of the Chiefs. The interior of the Chief's house is then given—"The houses of the Chiefs were spacious, and vessels of gold and silver were used." The room is large, the walls hung with skins. The Chief lies ill on a low couch at the left of the room. A circlet of gold binds his forehead; his tunic is embroidered. His daughter gives him a drink from a golden goblet. Before we see his wife, we are told, "The women of all ranks occupied themselves with spinning." The Chieftainess is seated, spinning, on a high, throne-like, wooden chair against the arm of which rests her distaff. She wears a long white gown and dark mantle, and her hair is arranged in two long plaits drawn over the shoulder. At the back of the room, on a low stool, sits a minstrel mournfully plucking his harp strings. The caption, "Like their descendants the Welsh, the British loved music," precedes a close-up view. Then the Chief dies. "On the death of the King, his successor, in this case the Queen, crowned

herself in the presence of the elders of the tribe." The Chief is seen lying on the ground. His daughter kneels beside him. The Queen stands immobile. Women enter, hair streaming, and kneel, wailing and beating their breasts. A Druid enters and other indistinct figures. The Queen stoops, takes the circlet from the Chief's head, and slowly places it upon her own. "As a sign of mourning, British women unplaited their hair." The Queen, trance-like, unfastens her hair.

10. **Religion of the Britons.** Here the story changes. The next sub-title reads, "The Britons worshipped spirits which they believed to inhabit the trees," and the Chief's daughter is shown casting flowers before a tree and kneeling in worship, while a young Roman, or so he seems, leading a horse on loosely held reins, watches her. The caption follows, "The Priests, called Druids, were treated everywhere with the greatest respect," and the people kneel while the Druid speaks to them, or prays, from the steps of the Chief's dwelling. They form a procession—"The stone altars of the Druids were always built in lonely places"—and are seen filing into the clearing round a small, stone altar formed of upright stones placed in a circle and covered with a domed top. "The chief Druid mounted the altar to pray." This second Druid is an old, bearded man, with white hair, wreath-circled. He carries what is presumably mistletoe in his hand, and prays with much dramatic fervour, standing on the altar top. The people dance wildly around him—"The ceremonies included dancing and singing to primitive drums"—and a human victim appears to be bound and wounded in the midst of the *mêlée*.

11. "**Roman Britain,**" Reel II. **Outdoor Scenes : Gates and Forum.** This reel is shorter than Reel I., and the scenes themselves more brief. It is called "Roman Civilian Life." We are told, "The Roman occupation of Britain was a military one. For nearly 400 years Roman soldiers were a common sight in Britain." A posse of Roman soldiers preceded by an officer march along a road bounded by thick hedges and trees. "The Romans stationed in Britain lived chiefly in large walled towns, entered by a drawbridge over the moat." The inhabitants of the town are stationed on each side of the roadway leading to the bridge, to greet an important Roman official on his first arrival. The walls are very dimly seen, but the curved wooden drawbridge with its twin towers is admirably clear. The townsmen raise their arms in Roman salutation as the dignitary is carried by in his litter. This heads the cavalcade, which is brought up in the rear by a guard of soldiers. "The centre of the life and business of a Roman town is the forum." A double line of soldiers file into the market-place from the arch of the surrounding colonnade. "On one side stood the Temple of Victory." The front of the temple is seen, and then a close-up of the winged statue of Victory over the entrance. "A Roman dandy followed by his attendants, a source of great amusement to the less civilised Britons." A dandy with tunic and toga and very affected manners greets a Roman lady who is being carried through the forum on a litter. Two or three wild-looking Britons, middle-aged workmen with pots and bundles, laugh at the scene, and a lad imitates the attitudes of the Roman. The Britons are jostled against the Roman, who angrily turns, but "Roman soldiers are always ready to act as police and quell disturbances," and two or three soldiers rush forward and bear off the unruly Britons into custody. "Little knots of Roman women would gather to exchange news"—and groups, mostly of young girls apparently in the early twenties, chat in a corner of the forum, while "Strings of slaves heavily laden threaded their way through the throng." These slaves are bent beneath

the weight of baskets on shoulder and back, and are harried forward under the lash of Roman soldiers.

12. The Basilica—Government. The interior of the basilica is next shown. "In the basilica all the important business of state was performed. The Governor sat in state between the statue of the Emperor and an altar." We are given a brief glimpse of the length of the hall, with its pillars, and with many Romans again ranked at sides as if leaving passage for a visitor. A close-up is given of the Governor, with purple bordered toga, seated on a raised dais, attended by a lictor with fasces and by one other person. Smoke rises from the low altar behind him. The personage already seen in the litter approaches the steps—"the arrival of orders from the Emperor." The Governor rises, the two salute, the newcomer hands a roll to the Governor, who turns to the altar, backed by the statue of the Emperor, and bows deeply, raising the roll aloft between his hands. He then turns, waves the newcomer to a seat, and resumes his own to read the message. The letter, printed in roman capitals, purports to come from Nero, and orders the Procurator to collect a double tithe of corn from those parts of the province which have hitherto paid only one. The message is thrown large upon the screen, first in Latin and then in English. We leave the Governor looking balefully upon the messenger. The identity of this official never becomes clear. Personally, I turned him into the Procurator, and used the obvious displeasure of the Governor to illustrate the cool relations between Governor and Procurator usual in the Roman provinces.

13. Social Life. Scenes in the baths and a Roman house follow—"After business was finished and before supper, a Roman usually went to the baths and was massaged." This scene gives merely one corner of the baths where the Governor reclines upon a couch while slaves massage him. The attendant formerly with him in the basilica here appears in the guise of barber, handing a looking-glass for the Governor's judgment on the success of his operations. "The guests assembled for supper outside the dining-room." The Governor, toga doffed, greets his guests in the open corridor, where pleasure is momentarily interrupted by the hasty arrival of a centurion with some urgent message. Then follows a triclinium scene, and "at table the company is entertained with music and garlands are placed on their heads." Two guests, a man and woman, drink together from one goblet, "A friendly custom—two people share one cup." Slaves in the background waft fans. The scene is hilarious and convivial.

14. The Defence of the City at Night. "Meanwhile, at nightfall, the sentries left the bridge." "The bridge was then raised by the labour of slaves, who turned a great wooden wheel." As the half-naked slaves turn the windlass they are lashed by Roman soldiers. "From the towers of the bridge signals were made at night by torches"—a Briton waves a lighted brand from the watch-tower. "At night within the gates a guard was stationed to keep watch." Two Roman soldiers sit beside a brazier at the gates.

15. "Roman Britain," Reel III. Romans and Britons at War: The March. The letters S.P.Q.R. are flashed on to the screen, and give place to the phrase at length, "Senatus Populus que Romanus," and then to the English translation, "The Senate and People of Rome." This is followed by the title, "The famous standard of the Roman legions, feared throughout the Ancient World," and a divisional standard is shown being borne forward, though the bearer is not seen. The letters S.P.Q.R. appear beneath its metal disc. Then "A Roman General reviews his troops" gives a long shot of a detachment; the

soldiers salute when the General rides into view. Follows, "The Roman Army on the march." The General, on horseback, and other officers lead the column over open down country. Mid-views of different companies are shown as they march, so that a general view of equipment can be gained. "Roman soldiers did not carry their kit on their backs but on sticks"—a body of troops with packs on sticks over their right shoulder, some with helmet hanging on the chest, toil up a slope. Next comes "A brief halt to rest," a long shot of the regiment resting on a hillside. They return to the march, and we are told of "The famous short step with which Roman soldiers covered great distances in unbelievably short time. Any who fell out on this march were left." One soldier falls and is ignored by the others, who scarcely bend their line to avoid his prostrate figure. One shot merely shows the lower half of the soldiers' legs, so that sandalled feet, straps round calves, toe meeting heel in the pace, are clear. The army has marched the allotted distance. "At night Roman soldiers always protected the camp by a high earth wall on which sentinels were placed." Only one small corner of the camp, near a gate by which the column enters, is shown. Officers, in long cloak, talk in front of a tent.

16. The Britons in Rebellion. The scene shifts to the Britons. "In conquered provinces such as Britain, Roman soldiers were often called out to quell disturbances and to act as police." Three Roman officers stand on the steps of a large building. Their accoutrements—one wears the lorica squamata—are plain. A close-up of the head and helmet of one is given. He shouts an order. A bugler gives a call. Soldiers fall in, fastening their chin-straps as they run. They march off, and are seen approaching a British settlement. At the gate of the village the standard-bearer, in skin head-dress, steps out of line and stands by the gate. The villagers stand inside the gate and do not resist the Romans' entry. The soldiers march to a clear space outside the Chief's house and stand in ranks. A house of British "corridor" type is here plainly shown. The officers ascend the steps to talk to the Chief and Druid. This scene dissolves into a view of a cordon of Roman soldiers, arms linked to keep back a crowd of angry Britons. A close-up of two or three soldiers in the line gives an excellent view of the dress of the private soldier. The cordon is broken. The Britons surge through. The caption, "In the first ten years of the Roman occupation the Britons frequently rebelled against foreign domination. The British signal for war was a flaming torch," leads to another view of a British village. A crowd stands round a bonfire. The Chieftainess of Reel I. speaks to them; they raise their arms and cheer, and crowd forward to receive lighted brands from their ruler. "Secretly the British fighting men would gather in the forest." The Chieftainess and her daughter stand in their war chariot in the woods, a Druid near. Tribesmen, in tunics, without helmets, but with shield and long spear, gather. A torch is waved.

17. The Battle. We read, "The famous weapon of the Britons, their knife-wheeled war chariots," and the chariot rushes wildly from the glade and over a hill slope, to emerge between an avenue of trees, the horses still flying at unabated speed. The knives glint in the sun as they turn with the wheel. "The British women and children accompanied the army to the battle-field to encourage the warriors." The women, hair unbound, bid farewell to their menfolk ere these fall into rank. The Britons are armed in haphazard fashion, many with a sort of scythe blade fastened to unsmoothed branches. The last men go. Old men, women, and children are shown watching the battle from their rude carts, calling and gesticulating. "The Britons always began a battle with a

display of chariots and cavalry that was intended to frighten the enemy." Two lines of Britons stretch across a narrow valley. A Chief, with horned helmet, rectangular shield, and long tapering sword, heads each line. They shout an order, raising their swords. The ranks divide to allow four or five chariots to rush through. These dash quickly up to the front line of the enemy and then turn round and as rapidly retreat. The Romans are shown standing unmoved. Twice a handful of cavalry repeat a similar manoeuvre; then the Britons charge the Romans, advancing in three relays. The Romans maintain their defensive attitude, shields interlocked—"The Roman wall of shields, a formation reintroduced by the Roman Governor, Suetonius." "Against this wall the Britons dashed themselves in vain." The Romans hurl their long javelins, and advance. Some suggestion of a *testudo* is shown, and the forming up to effect a breach in the enemy ranks. "The Romans would then advance in their famous wedge formation." The Britons are put to flight, the Romans run onward till all stragglers are cut off. It is "A triumph of discipline over untrained courage." The reel ends, as it began, with a close-up of the standard raised aloft, "The Sign of Victory."

18. "Wolfe and Montcalm," Reel I. Pitt, Director of the Campaign. It has already been explained that this is one of the Yale Chronicle of American Photoplays kindly lent to the Historical Association by the Yale University Press for the purposes of this enquiry. The first reel opens with a scene in Pitt's study, "William Pitt, England's Great War Minister, whose policy was to strengthen the American colonies." A servant announces Anson, "Lord Anson, able Chief of the Admiralty." They discuss the plan of campaign, examining maps. A map showing the disposition of territory in North America on the eve of the Seven Years' War is shown. Pitt enforces his remarks on the navy by pointing to a model ship which stands on a table at the side of the room. The conversation is given in sub-titles. "We must build up a Navy that can sweep our enemy from the Seas." "First of all, we must free our American colonies from every trace of the French menace." "Britain's sword must cut new boundaries, Admiral. You are its hilt, Saunders with his Canadian fleet the blade, and General Wolfe the point."

19. *The British and French Commanders.* The next title reads, "September 12th, 1759. On board the British Flagship, *Sutherland*. General James Wolfe in command of the expedition against Quebec." Wolfe is seated at his desk examining papers. His surgeon visits him, and is told, "You have done your best, Doctor. You have kept me practically without pain for the last two days, and if I have 24 hours more, I shall be content." Vaudreuil and Montcalm are each introduced by a full-length close-up on the screen—"Vaudreuil, the Governor, Canadian-born, jealous of the General sent from France," and simply, "General the Marquis of Montcalm." The two are then shown in angry conclave at Vaudreuil's headquarters. The names of the speakers are not given.

Montcalm. Heavy firing has been heard in the Beauport district.

Vaudreuil. To be sure. It is the English screening their retreat.

Montcalm. Retreat! On the contrary, I believe they are preparing a new attack.

Vaudreuil. We have defeated them at every point. Where could they make another attempt?

Montcalm. You forget. The danger point is where we land our convoys from Montreal—the Foulon.

(A map of the St. Lawrence is thrown on the screen, with Montcalm's finger pointing to the Foulon.)

Vaudreuil. Do you think the English have wings to fly up those inaccessible cliffs?

Montcalm. I want an entire regiment to guard the Foulon. We can't rely on the abilities of Captain Vergor. Besides, his force is too weak.

Vaudreuil. Captain Vergor is my choice, but since you are so timid, I will attend to the matter myself, to-morrow.

Montcalm stalks furiously from the room.

20. **English Preparations for Attack.** Meantime, the English are perfecting their plan of action. We are told, "On the night of the 12th the British fleet keeps up a constant bombardment," and see sailors training guns on the coast. "1700 picked men gather in small boats round the flagship." In his cabin Wolfe gives to Jervis his farewell letter to his mother, his notebook and will and the portrait of his fiancée—explaining that he has a premonition of disaster. An officer comes with a message. Wolfe takes cloak and hat and descends the ship-side into one of the boats. Two lanterns are slung into the main-top shrouds, and the boats at this signal set sail down the river. The simultaneous bombardment on the Beauport coast is indicated by the hurried entry of an officer into Montcalm's room, and his announcement: "There is no doubt the English plan to land here at Beauport, and soon." Montcalm replies: "Keep the entire army on the alert. We can do nothing more."

21. **"Wolfe and Montcalm," Reel II. Actions preliminary to the Battle.** "At daybreak, September 13th, 1759," the English boats are coming close inshore. "Wolfe's landing-place was the very spot that Montcalm knew to be poorly defended." The soldiers land on a small beach under the cliff and form ranks. Wolfe speaks to his First Division, the "Forlorn Hope." "Gentlemen, it is a desperate chance, but we must go up." Twenty-four volunteers, among them many Scots, lead the First Division up the Heights, while the remainder wait below. The cliff face is wooded, thickly covered with spruce and fir. The men clamber up hardily, clinging to big roots and branches. The foremost, on nearing the top, ties a rope to the trees, and some of the rest haul themselves up by its aid. At the top of the cliff is "The post commanded by Captain Vergor," but slack watch is kept. Vergor is sleeping in his tent; the sentry doses against a tree. The English overpower the sentry and rush forward. Hearing the noise, the French hurriedly seize arms and give fight. Vergor gamely fights with his men, but, thus surprised, they are soon put to rout and flee towards Quebec. "The sound of cheering told Wolfe that the way was open for his main force to go up the Foulon Road." We have a close-up of Wolfe smiling at the English shouts of exultation, and then see him marching at the head of his men up the path circling round the cliff face. However, still to be reckoned with is "The French battery at Samos atop the Heights with an excellent range for checking Wolfe's second line of boats." The French, from their entrenched battery, fire upon the boats, wrecking some, but are surprised by a rear attack from a British contingent, and flee without offering resistance. But Montcalm has heard the sound of the Samos guns. Looking excitedly from his window, he says to De Levis: "That new note in the bombardment means that the battery at Samos is defending the Foulon." Meantime, "Vergor's men reach the St Louis Gate" of Quebec, while Montcalm is leaving his headquarters exclaiming, "I must make sure what this means." At Vaudreuil's premises "The Governor-General enjoys his breakfast." An officer enters with a letter. Impatiently Vaudreuil opens it, then says thoughtfully to the officer: "From the Commandant at Quebec. A handful of mad English have landed at the Foulon."

The officer asks : " Shall we tell Montcalm ? " " No," replies the Governor, " I am quite able to handle this with my Canadians—later." We leave him continuing his repast, to see Montcalm riding hurriedly towards Charles River. He draws rein and gazes dumbfounded across the plain where he sees the English marching. Returning, hell for leather, he calls out the French army. " On the plains of Abraham, September 13th, 1759, nearing ten in the morning," the English advance, Wolfe still leading. Then a map of the Quebec region is given, the march of the English shown by an extending dotted line. We have a glimpse of the French crossing the Charles River over a bridge of boats, and their line of advance is also indicated on the map. Outside the St. Louis Gate Montcalm addresses his massed ranks : " On your conduct to-day the last hope of New France depends," and the men march to the attack.

22. The Battle. The English are drawn up two ranks deep facing Quebec. Wolfe passes along the line giving the order : " Remember. You must not fire until the enemy is within forty paces." Indians are in ambush amongst bushes on the flanks, " Indian Allies of the French." Two or three momentarily appear as they choose cover. English soldiers place a cannon in position, with powder-bucket near and a pile of balls, " Captain Yorke's six-pounder, the only field-piece of the British." Wolfe is shot in the wrist, apparently from a shot by an Indian. He pulls out his handkerchief, and an officer adjusts it round the wound. The cannon is twice fired at the approaching enemy, then is seen being hauled away to another position. Reel III. continues with the action of the battle. The opposing ranks are close. The English fire their devastating volley ; a line of Scots are seen taking aim. Wolfe lifts his sword, gives the order to charge, and is wounded as he leads on the right. Men and officers run to his aid. He is carried aside and tended. The English are scattering the French, " The Languedoc regiment is the first to break." " The Royal Roussillon for a time holds fast." The look-out stationed near Wolfe cries : " They run. They run." Wolfe says, painfully lifting his head : " Who run ? " " The French, Sir. Egad, they give way everywhere." " Then I die content." Meantime, Montcalm is trying to rally his men, but is wounded, and his horse borne in the general rush towards Quebec. Two soldiers run to support the General, who is carried through the gates of Quebec bent low on his horse. " The General. He has been killed," cries one of the women who are watching for the return of their kinsfolk at the gate. Montcalm with difficulty raises himself erect—" Be not distressed on my account, my good friends." Now, " The Governor-General decides to take the field." Vaudreuil rides proudly from the gate, becloaked and bef Feathered. He reins in his horse in horror immediately outside the walls as he looks out over the plain, turns almost at the gallop back into the town, and the drawbridge creaks upward shutting out the enemy. Montcalm lies in bed, saying to the doctor : " Tell me the truth, Doctor, have I long to live ? " The Doctor shakes his head in negative reply. Montcalm turns aside, clasps the handle of his sword which leans at the bedside—" I am happy not to live to see the surrender of Quebec."

23. Events of the Winter 1759-1760. " In England two months later," Pitt again talks to Anson in his study. He reads a despatch. " Wolfe has taken Quebec. The point of our sword has penetrated—but we have paid for our victory with the life of our noble young General, Wolfe." Serious discussion follows. " And now our fleet will have to withdraw from the St. Lawrence because of the ice and winter at Halifax. Our army will be isolated at Quebec." " And when spring comes, the French will advance from Montreal and attack

Quebec with all the forces they can muster." "The first fleet up the river will turn the scale. If it is a French fleet, the enemy will recover Quebec. If it is our fleet——" Then is shown a desolate view of the walls of Quebec, snow piled up against them, as background for the caption, "Disease and privation through the bitter winter took toll of the small British garrison in Quebec. In the spring, of 8000 men but half remained to bear arms." This dissolves first into "The last French army in America had surrounded Quebec, and, though unable to take the city, held the British within the walls as in a trap"; and later, "The armies were deadlocked. Day by day all eyes strained eastward for a sail." The English watch from the walls of Quebec, the French from the cliff face. They scan the horizon through their telescopes. Then slowly comes into sight the upper rigging of a sailing-ship, shown topping some bushes, apparently as the ship rounds a lower cliff. The French exclaim, "It must be one of ours. It must be." The news spreads in Quebec. Men rush to the walls. Says the look-out, "I can't make out her flag." Slowly, "Up the river, stripped for action, came a fighting ship, scouting ahead of the fleet, not knowing whether English or French were in command at Quebec." The news reaches "The Chevalier De Levis, commander of the French forces besieging Quebec." With a guard of men he arrives on the cliffs, and looks out to sea. From the walls of Quebec comes a cry, "They are swinging out a boat. We'll soon tell"—then the jubilant shout as the small boat draws near and the sailors ship oars, "English Blue-Jackets," and hats are excitedly thrown in the air. But De Levis turns to his men grimly—"The enemy. We must prepare at once to retreat," and immediately his detachment marches away. "The French forces were now concentrated at Montreal, the last stand in the tragedy of France's lost cause in North America. And at Montreal, September 8th, 1760, Vaudreuil surrendered, and the French menace to England's American colonies came to an end." The English senior officers stand outside their tents. Their soldiers are drawn up on either side. Vaudreuil and two other French officers slowly approach. The rival leaders salute. Vaudreuil half-draws his sword from the scabbard, hesitates, pushes it back, then reluctantly draws it forth again and makes surrender. His second in command follows suit, and as he does so the picture fades out into a map of America, on which a moving pointer draws a black sheet over the lands that now belong to England. The final caption reiterates the analogy of the sword. "And thus the point that was Wolfe, the blade that was Saunders, the hilt that was Anson, and the handle that was Pitt, had removed the last obstacle to the expansion of the English-speaking race in North America."

24. "Naval Warfare, 1782-1805," Reel I. British Instructional Films Ltd. made this film of cuts from a picture-house film, "Nelson," for use for revision purposes with Senior Forms of School Certificate Standard. It opens attractively with "The Defences of Britain"—waves rolling shoreward; "In the present day"—a Dreadnought; "And in Nelson's time"—a sailing-vessel. The caption "Throughout the eighteenth century Britain and France struggled for the mastery of the sea" precedes a view of the deck of a sailing-vessel, sailors dealing with rigging and hoisting colours. Then we see something of the working of the guns, guns smoking at the side of a vessel after firing their recoil. "1789. The French Revolution" leads to a map of Europe marked with the boundaries of its several States. France becomes black. "1792. Austria and Prussia declared war on the French Republic." Austria and Prussia become light grey. "France promptly seized the Austrian Netherlands." The Nether-

lands become black. "The port of Antwerp was opened as a trade rival to London." The names Antwerp and London are flashed on the map. "The reopening of Antwerp and the execution of Louis XVI."—a crowd surges round the guillotine, on which, dimly, stands a figure. "Made Britain in 1793 join against France in the First Coalition." The map of Europe returns as it was last shown, and the lands embraced in the First Coalition become light grey. "The object of the British Admiralty was to blockade French ports. No vessel might leave or enter." Dotted lines extend gradually round the coasts of France when the last map is reflashd on the screen. "1793. The British attack on Toulon was defeated." An arrow on the map pointing to Toulon is reversed. "In 1794 the French fleet escaped from Brest and a battle was fought on the Glorious First of June." An arrow points to Ushant. "In 1795 France conquered Holland and made peace with Spain and Prussia." Holland, Spain, and Prussia become black. "Thus obtaining new naval stations." The names Texel, Ferrol, and Cadiz are flashed on the map. "These ports had also to be blockaded." The dotted line of the blockade is extended round these ports. "The extra men needed for the Navy were obtained by the Press Gang." An amusing scene in an inn follows. Several tars are smoking and drinking when a knock sounds on the door. An officer and his men are outside. The bustling landlady pushes her clients into hiding-places. The press gang enter to find a deserted room, but smoke issuing from a hole in the side of a large cask betrays the refuge of one unhappy salt, who is forthwith taken prisoner. "In 1797 Sir John Jervis sighted the Spanish fleet leaving Cadiz to join the French." Another brief glimpse of the deck of a sailing-vessel is given. The next two sub-titles are: "He split the fleet in two, but while he tacked they would have escaped," and "if Nelson had not left the line and barred their path." To illustrate this manœuvre, use is made of the ingenious device of model ships. "Nelson thus turned a skirmish into the brilliant victory at Cape St. Vincent." Nelson is seen receiving the swords of the vanquished Spanish officers on the deck of the captured *San Josef*. "Life aboard was hard and dull." Seamen swab the decks. "Midshipmen on the look-out found it chilly." "When a British fleet put in for fresh stores." "Wives, mothers, and pedlars hastened aboard and there were great rejoicings." The women run down the quay, are rowed out to the men-o'-war in small boats, and dance with the sailors on deck. "But the dull hardship of perpetually watching enemy ports led to a mutiny in 1797." Seamen are scrubbing the decks. A petty officer lashes one of them, who resists and ceases to work. The other sailors watch sullenly. "Order was restored largely through the efforts of Nelson, now an Admiral." Nelson inspects the men on this same ship. "Admiral Duncan was thus able to defeat the Dutch fleet off Camperdown in 1797." An arrow points to Camperdown. "All England rejoiced over these victories." People run to hear the news in a London street and demonstratively express their pleasure. A sailor, the centre of admiring yokels, sits drinking and spinning yarns on an upturned cask in a village inn.

25. "Naval Warfare," Reel II. "Napoleon slipped the blockade at Toulon and sailed for Egypt." A dotted line gradually extends from France to Egypt on a map of the Mediterranean. "Egypt was to be his base for a new Empire in the East." A map of the Eastern Mediterranean is given. "Nelson found the French fleet anchored in Aboukir Bay at the mouth of the Nile." Toy ships demonstrate the position of the French off the coast. The line of English ships is approaching. "In spite of the dangerous shoals, Nelson sent his fleet between the French fleet

and the shore." The English model ships sail on both sides of the French ships. "The French fleet was caught between two fires and their Admiral's ship blown up in the Battle of the Nile." This scene is of great vessels in the midst of smoke and of the fire of explosion. "Napoleon marched towards Constantinople, which was to be his base for a new empire in the East." On the map of the Eastern Mediterranean the line of march to Acre gradually appears. "He was unable to take Acre, which was defended by a British fleet, and he had to turn back." The line disappears. "Abandoning his army in Egypt, Napoleon returned to France." A white line between Egypt and France gradually fades out in sections. "He persuaded the Baltic countries to form the Armed Neutrality to prevent British trade in the Baltic." On the map of Europe the names of these countries are flashed in turn, till all are seen. "A British fleet therefore attacked the Danish fleet anchored before Copenhagen." Toy ships mark the situation of the enemy fleet and show Nelson's line of vessels sailing in and taking position a cable's length from the enemy fleet. "At this battle Nelson refused to see the signal to retire, and by continuing the battle put the Danish fleet out of action." Nelson is shown on deck putting the telescope to his blind eye, and shaking his head with a slight, sardonic smile as he lowers the telescope. "In 1805 Napoleon, now Emperor, concentrates troops at Boulogne to invade England." On the map of Europe three white arrows point to Boulogne. "The scheme of Napoleon, the soldier, to raise the blockade and open the Channel. The plain lines show the course of the French ships, the dotted lines the course of the English ships." Black lines move across a map of the Atlantic from the French naval bases to the West Indies, and return. The dotted line of the English fleet follows from the Mediterranean, but does not reach to the front of the French solid lines before these return to Boulogne and turn again towards England. The lines are erased from the map for the sub-title, "The result of the scheme, wrecked by weather and by Nelson the sailor." Missiessy's fruitless voyage from Rochefort is indicated by a black line which stretches across the ocean, then disappears. Afterwards, Villeneuve's journey is shown, Nelson's line later starting. Villeneuve's black line turns back, the dotted line gaining upon it; in mid-Atlantic the dotted line shoots ahead, to show the speed made by the frigate to England. Dotted lines put out from England, divide, and deflect Villeneuve's line southward to northern Spain. Later, the line moves from Vigo Bay to Cadiz. A view of Nelson being rowed out from shore to his ship follows, under the caption, "As soon as the French ships moved from Cadiz, Nelson was after them." "At Trafalgar he bore down on the enemy in two lines." Tactics are again indicated by toy ships. "The brilliant victory at Trafalgar was marred by the death of Nelson." Nelson walks on deck, is struck, and falls. The film ends with a view of a merchantman after the sub-title, "The results of Naval Warfare. British merchantmen were free to sail the seas."

26. "The World War and After," Part I. The League of Nations Union is responsible for the production of this film of five parts. Part I. begins with scenes in a London slum. "When neighbours are quarrelsome." Two women wrangle over a garden fence, a man laughs derisively as his neighbour lets slip and breaks a basin of food, a little girl refuses to share her bag of sweets with two others. "One blow may start a street fight." A respectable man steers out of his way a boy playing in the street. The urchin promptly hits the man in the small of the back, and is shaken by the shoulders. The child's father comes truculently forward and abuses the stranger. A neighbour takes the

other side. A crowd gathers, and a general fight, in which the original antagonists take little part, ensues. In the original, unrevised version, used in most of the experiments, the street fight came at the beginning of the film, without the preliminary scenes illustrating ill-will.¹ This serves as an analogy suggesting the state of affairs in Europe prior to 1914, and of the comparatively small incident which precipitated the major portion of the world into war. "When rival nations are warlike—one murder may start a World War." "In 1914, when the armies and fleets of Europe were bigger than ever before, the Emperor of Austria's nephew was murdered." A close-up follows of the portion of the *Times* of the day announcing the assassination—"The Austrian Heir and his Wife murdered. Shot in a Bosnian town." A panorama of Serajevo is shown. "Where is Serajevo?" On a close-up map of Austria and Serbia an arrow indicates its site. "Austria accuses Serbia." The countries are hatched over. Then the word "WAR" is flashed on the black screen. The map reappears, and an ominous, black blot spreads over the two countries. "Other nations join in." On a map of the world the countries partaking in the war and their dependencies become black in the order of their entry into hostilities, the dates and names being successively indicated at the foot of the screen. In 1918 the map turns white while across it flash the words, "The War Ends." A close-up of Big Ben with the hands at 11 A.M. and above it the date of the Armistice ends this section.

27. **Part II. What the War left behind.** "The War left behind nine million dead"—a moving panorama of white crosses is seen. The fate of others is indicated by the caption "No grave but the sea" and the view of rolling waves. "Millions crippled and maimed," "Behind a battlefield," precede official photographs of the work of the R.A.M.C., engaged in helping the wounded to safety,—of a long line of Red Cross Ambulances; "Bringing home British wounded,"—a ship steering for home; "Eight years after,"—hospital scenes of disabled sailors and soldiers; "Blinded by Poison Gas,"—Sargent's painting of afflicted survivors being led back from the lines by fellow-soldiers; "Blind for Life,"—basket-making and such scenes at St. Dunstan's. Then succeed scenes in Europe, small towns in north France, prosperous and thriving in 1914, a deserted waste in 1918, the plains of Poland before and after the war. "The war left lands laid waste and millions of people homeless." "Farmers fleeing from Turkey to Greece. They have lost crops, houses, flocks." Peasants are seen plodding wearily by carts containing the salvage of their homes. Two old people pathetically seated at the wayside represent "Peasants who have lost everything." "Ruined homes in Germany" are pictured, and "German villagers fleeing from the Russian armies." "They are glad to find refuge in a dug-out," shows children at the door of a snow-covered hut. At the end of the reel, results in financial loss and frontier changes are indicated by an animated diagram of the expense involved—"The World spent seventy thousand million pounds on the War"; and by a map of Europe with frontiers amusingly swaying in and out and breaking into fragments after the title, "The War left the countries of Europe broken up."

28. **Part III. The League of Nations.** "Statesmen attempt to mend a shattered World." A view of the Peace Conference at Versailles in 1919 is seen, and a close-up of President Wilson. "Woodrow Wilson, President of the United States of America, proposes that all nations shall league together against

¹ The original opening has been restored in the latest revision of the film in 1930.

war." Then we read, "The Conference accepts the Covenant of the League of Nations. It is placed in the forefront of each peace treaty." A close-up of the preamble to the Covenant follows, and, repeated separately, the key phrases, "To promote international co-operation" and "To achieve international peace and security." This is succeeded by pictures of the signing of the Covenant, first, "As Sir William Orpen painted it," and next, "As the camera-man photographed it," a scene from the contemporary Pathé Gazette. "Many nations join the League." A list of the 42 original members of the League in 1919 is unfolded, and names of the newcomers added with the date of the year. Black lines through the names Brazil and Costa Rica intimate their lapse from membership. The chain of world-peace rings round the screen, arrows point to the names of the loose links lying below. "Until all nations are linked together, the League is handicapped." The machinery of the League is then portrayed, with pictures of the Assembly and Council, of "The World Court for Justice between Nations" in session, and of the Peace Palace at The Hague. Reference to the permanent Secretariat is pointed by a picture of Geneva and of the headquarters of the League. We are told of the International Labour Office, and then see "The Office of the I.L.O. at Geneva" and "Post-time at the I.L.O.," officials delivering a stack of parcels for the mail van. A moving diagram shows how the different countries contribute to the League's expenses in proportion to their wealth; block mounting on block shows the shares of "the big countries"; "the smaller countries" and "the smallest countries" are represented by blocks of proportionately diminished size. Finally, on comes John Bull, to survey a pile of parcels, together labelled "Estimates." He shakes his head at the size of packages marked "War Debts," "War Pensions," "Armaments," and compares these with the tiniest parcel, the year's contribution to the League. All are stowed in the sack stamped "Rates and Taxes," and John Bull staggers off with his burden on his back.

29. Part IV. The League at Work. At the beginning of the fourth reel the disorganised frontiers of Europe shown at the end of Reel II. sort themselves out to indicate the new frontiers formed after the peace. "Seven new States were carved out." Finland, Esthonia, Latvia, Lithuania, Poland, Czechoslovakia, Yugoslavia are hatched over in turn on the map, their names given in labels at the left of the screen. This is "New Countries. New Europe." "Nations with new frontiers may be quarrelsome neighbours." "Why fight about it?" To emphasise the query, the huge question mark appears by itself in the centre of the screen. Another illustration from everyday life illustrates the difficulty of frontier settlement, and at the same time the existence of means to that end. Two cottagers on a new estate are gardening. One unconsciously encroaches on his neighbour's land. "My ground," says the other, and affairs look menacing. A mutual friend, however, produces string. The area of the whole plot is measured, and thus the dividing line is both reasonably and amicably fixed. So has the League intervened to settle disputes which might have led to war. The series of ten rival claims peacefully determined from Geneva in the six years after the war are indicated by lines simultaneously flashing from Geneva to the contending countries, whose names again appear in labels below the map. Details of one such quarrel, that between Sweden and Finland for possession of the Aaland Isles, are given to illustrate the working of the League. "Sweden and Finland wanted the Aaland Isles, which lie between them." "The Aaland Islanders at work." They are shown hay-making, dairy-farming, lumbering, and fishing. Hands come across the Baltic Sea from

Finland and Sweden on a map of the district, and attempt to seize the islands. "Great Britain exercises her 'friendly right' under the Covenant to inform the League." "The Council of the League meets in London—at St. James's Palace." London and the Thames are seen, then the Councillors speeding in automobiles to the Palace. A diagram of the Council Chamber appears, an oblong for the table, with surrounding semicircles for the representatives, an arrow pointing outward to the name of each. "Sweden and Finland are asked to attend the Council;" two semicircles are added, one at each end of the council table. Then an ordinary, moving picture of the Council is given. Commissioners go north to investigate matters. The line of their route from Geneva is marked on the map of Europe in moving lines. Scenes are shown at Stockholm and Helsingfors. The line of return is given, another Council indicated. "It is decided that the Islands belong to Finland, but should have self government." "Sweden and Finland accept the decision." Hands are shaken across the Baltic. "They have been friendly ever since."

30. **Part V. The League Machinery in the Tenth Dispute.** Part V. deals with the Greco-Bulgarian dispute of 1928. We read, "Bulgaria is behind the mountains. The plain belongs to Greece," and see a relief map of this frontier district. "The frontier runs across the Heights. Greek and Bulgarian sentries patrol the roads crossing it." A picture of two sentries of the rival countries avoiding each other as they patrol the same area gives place to a close-up of a portion of the *Times*, "Killing a Sentry," and then "Fighting." Captions, quickly flashed, tell of the Greek ultimatum to Bulgaria, a time limit of forty-eight hours. "Will it be war?" Then comes "The sort of thing that happened"—circling aeroplanes, bombing, a burning village, peasants in flight. "In accordance with the Covenant, Bulgaria appeals to the League." Sir Eric Drummond hears the news. A message flies over the wires to Paris. We see Monsieur Briand, then President of the Council. "By one o'clock"—the times throughout this episode are marked by moving hands on a big clock-face—the Council is summoned, all nations members of the League told of the dispute, the Greek and Bulgarian Governments called upon to withhold action. Next morning, at 5 A.M., troops are shown on the frontier moving up a hill for an attack timed for 8.30. But at 6 o'clock comes the order, flashed across the screen, "Cease hostilities." The troops reverse order and descend the hill. "Thus, in twenty-four hours, the League prevented a fight from becoming a war." Then, "The Council of the League assembles in haste by sea, air, and land." Again comes the diagram of the Council Table, finally with the disputants attending. Commissioners visit the scene of the trouble. "They talk with villagers, soldiers, and officials on the frontier." "They go back to Greece and receive more deputations." "At Geneva, in December, the Council considers the Commissioners' report." It should be noted that here, and whenever Geneva is mentioned as the scene of action, the first picture shown of the town is reflashd for a moment on the screen. The Council "decide the damages to be paid and suggest how the frontier may be peaceably guarded. Greece and Bulgaria agree and are now more friendly." Then is announced, "The League of Nations means to get rid of war." A white map of the World is shown, with "League of Nations" above, and below, "56 States in 1926." Finally, we read, "'I call upon my people to support the League of Nations.' H.M. The King," and the film closes with a photograph of King George V.

31. **Note on the Construction of the League Film.** The following extract

from the official pamphlet issued by the League of Nations Union for use with the film is of interest :—

“Whenever possible, the pictures are photographs taken on the spot, at the time of the happenings they record. Such, for instance, are the official War Office pictures of the care of the wounded behind a battle-field, the moving photographs taken by Pathé of the Peace Conference and of the signing of the Treaty of Versailles, also the still and moving pictures of refugees and ruined homes in various countries, including Germany ; of the meetings of the Assembly, the Council, and the Judges in session at The Hague, and of the visit of the League Commissioners to Bulgaria. Photographs like these are in themselves an historical record.

Two scenes are photographic reproductions (taken by special permission) of famous paintings by contemporary artists, which have in themselves historical value. It is instructive and amusing to compare the still photograph of Sir William Orpen's painting, ‘Signing the Treaty of Versailles,’ with the moving photographs of the same event, taken at the time by Pathé.

For other scenes no contemporary photographs or pictures are available. For example, no camera-man was present when the Greco-Bulgarian frontier was suddenly shelled, or at the moment when the invasion was dramatically checked by the League's intervention. In such circumstances a true idea of what happened can only be conveyed either by a text-book, written in the study, or by a screen picture, constructed in the studio, from the best available information.”

32. Opinion of Producers on Criticisms. The Producers of the English films here described have been asked for their opinion on the investigators' criticisms. They point out that the films were experimental and made several years ago, that in certain cases they were cut out of entertainment films, that, in some, economy was a paramount consideration and that details of historical accuracy will always remain a matter of dispute among experts. For this reason, among others, a central advisory body is urgently needed.”

APPENDIX B

A NOTE ON THE PRODUCTION OF CINEMA FILMS AT THE ALTRINCHAM COUNTY HIGH SCHOOL

BY RONALD GOW, B.Sc.

THE main assembly hall of the Altrincham County High School for Boys was equipped with standard cinema projection apparatus in 1924. It was the wish of the Headmaster that all our experiments with the cinema should explore the value of the film as a teaching medium, and much data was collected by the staff on the use and value of many films. In 1926 a thorough investigation was made of the extent to which the teaching of geography could be helped by the cinema, and an elaborate series of tests was devised. The report of this investigation had been published elsewhere, but it is sufficient to note here that the tests were chiefly concerned with an attempt to evaluate what we have called "stimulation of interests," it being our opinion that, as a teacher of facts, the cinema is relatively unimportant. We have felt justified in using available films to assist the teaching of geography, nature study, and industrial science. Apart from the use of a "Baby Pathé" projector in the classroom as an aid to nature study for junior forms, all films have been exhibited in the main assembly hall, and have seldom been immediately correlated with the lesson.

The actual production of cinematograph films at this school was originally a separate and earlier activity. We had, as early as 1922, made our own films of life in the school summer camp. These were made on standard stock, with our own apparatus, and were shown in local picture theatres. As we became more ambitious a film play was suggested. It was eventually decided that as a minor education experiment we should turn our attention to the production of a history teaching-film, of which we had found an almost complete lack in our work with films in school. We had already made one small attempt to produce a teaching-film, a short reel on the sundew plant, with titles devised to stimulate the desire for further knowledge rather than to give information. But in the making of a history film we felt that we should be breaking newer ground, and that we could, as teachers, give some kind of sketch of what might properly be expected by educationists in such a film. The real motives behind the production were :

- (1) To provide an entertaining camp activity ;
- (2) To make the work of production educational ; and
- (3) To make an experimental teaching-film.

In 1926, therefore, we decided to make a one-reel film illustrative of the life of a cave-boy. The Neolithic period was chosen, and we were fortunate to secure the interest and advice of the late Sir William Boyd Dawkins, M.A., F.R.S., who thoroughly overhauled our scenario and made valuable additions and suggestions.

* * * * *

(A synopsis of this first film, "People of the Axe," has been given in Appendix A.)

It will be evident that the interest aroused among the boys engaged in the production, with the manufacture of properties, costumes, and huts, was sufficient in itself to justify the claim of an educational activity. Of the educational value of the film itself it is difficult for us to write. It has been observed, however, that the "People of the Axe" forms a good introductory stimulus to a study of the Neolithic period for pupils of the ages 9-12.

In 1927 we turned our attention to the Bronze Age, and again we had the expert advice of Sir William Boyd Dawkins. We wished to show the life of a late Bronze or Early Iron Age village, and we chose as our setting an island settlement of the Glastonbury type. We decided to present a story in a more connected and cinematic manner. A Boy Scout, interested in a book on Ancient Britain, falls asleep one sultry afternoon. He awakens to find himself in the Bronze Age, and is carried across the lake to a village, where he makes friends with the Chief and his people.

* * * * *

(A synopsis of this film, "People of the Lake," has been given in Appendix A.)

After "People of the Lake," we made, in 1928, a three-reel propaganda film for the Scout movement, in which we temporarily abandoned our historical motive. The film was commercially released throughout the country. Our production in 1929, "The Glittering Sword," although in the form of a mediaeval legend, with a fair accuracy of setting and costume, can hardly be reckoned as a pure history teaching-film. It has, however, a sufficient entertainment value to allow of its use in picture theatres, and at the moment of writing it has been booked to a highly satisfactory extent. As a "U" certificate British film it is interesting as an essay in children's entertainment, and as such it is chiefly booked. The theme of the legend is "disarmament."

To add a note on the cost of film production would perhaps be the most useful contribution we can make. We have found that, in our peculiar amateur circumstances, the negative cost is in the neighbourhood of £50 per reel, where no expensive settings are required. In our last film, where we erected a palace setting and a street scene in a mediaeval town, both in the open air, our expenditure was almost double. It should be remembered that we used our own cameras and apparatus, made our own costumes, scenery, and properties, and that no salaries were paid. Moreover, a great deal of the subsequent processing of the film was done by ourselves. To reproduce the same stories professionally would cost, at the very lowest estimate, £2000 per reel, and it is improbable that the very best work could be produced at that figure. When it is realised that a film made for school use can rarely have any value whatever as commercial entertainment, the possibility of a supply of history teaching-films seems very remote.

APPENDIX C

I. SCENARIO OF A FILM ON THE SPANISH ARMADA, WRITTEN BY FOURTH FORM GIRLS, aged 14

II. SCENARIO OF A FILM ON THE INDUSTRIAL REVOLUTION, WRITTEN BY SIXTH FORM GIRLS

THESE scenarios are submitted as evidence that the film does not dwarf the child's imagination, but the reverse. Whatever the defects, and naturally such attempts are not viewed from the point of view of film technique, the writers are thinking in terms of men and women.

I. Scenario on the Armada. The origin of this scenario has already been explained.¹ The form had seen the League film, and had, their teacher thought, gained a new outlook on history as being concerned with real people. When learning of the Armada a little later, they suggested that this would make a good film, and discussed in general terms in class how the scenes would follow. Later, the class was divided into groups, each of which produced one of the four reels. Of the method adopted, the teacher explained:—

“For books I lent them—

- (1) *The Sea Kings of Britain*, vol. i.
- (2) *Spain, 1479-1788*, Martin Hume.
- (3) Hakluyt's *English Voyages*.
- (4) *Philip II.*, Martin Hume.
- (5) *Philip the King*, John Masefield.

The dress details were gleaned from cigarette cards, old school books, etc., as well as books on costume in the reference library. I suggested to them the four reels into which the film seemed to divide most naturally.”

The explanation of each group's procedure and the scenario follow.

“THE MAKING OF THE FILM OF ‘THE SPANISH ARMADA’

“Group I.—Summary of work.

(1) In the first place, some girls in the ‘Preparations’ group had seen films dealing with this period, and by adding bits of what they remembered the idea of the film was soon understood.

(2) For the scenery and dress we referred to books which some girls brought or which were borrowed from the library.

(3) Thirdly and lastly, we had been taught the story of the Spanish Armada since we were quite small, and therefore it was quite impossible to forget this famous incident. (*Vice Group leader.*)”

“Group II.—Summary of work.

The voyage of the Spanish Armada was given to Group II. as their share in the composing of the film.

¹ *Supra*, 304.

The styles of dress and ships were obtained from books, but the greater part of the ideas were given by the girls themselves. One girl wrote all the ideas on a piece of paper. They were then set in order and made to read sense. These ideas took a great deal of time being arranged before every girl in the group was satisfied. The map and the scenery were then added, completing the work of the group. (Group leader.)”

“ *Group III.—Summary of work.*

The girls in Group III. worked very well. After having collected the main facts that were necessary for our part, we arranged them in the order of their happening. Various ideas were then forwarded and the best were written down. We drew many sketches to illustrate our meaning, and in some cases, dress. Before we were satisfied the film had to be rearranged several times, and extra details were added whilst superfluous ones were omitted. When eventually it was written out, every one was pleased with the result. (Group leader.)”

“ *Group IV.—Summary of work.*

Group IV. was allotted the part of the actual battle with, and the defeat of the Armada by, the English.

With the help of a history-book the most essential and important points were taken and put down. Then they were fitted together, each girl putting out her ideas, with less important details in between. As we went along, the story took a very definite shape until we came to the end. Here our imagination ran riot and an ending was produced which rounded off very ably (so we thought) the film of the Great Armada. (Group leader.)”

REEL I

THE SPANISH ARMADA

SCENE 1. *Dockyard at Cadiz.*

(Morning.) Half-built galleons, with Lords inspecting. They cannot understand why the galleons should be so light. Slaves are wondering the same thing.

(Night.) Drake's ships slide into the harbour silently, and work havoc amongst the Spanish ships.

(Morning.) Scene of desolation, Spaniards horrified.

SCENE 2. *Elizabeth's Court.*

Drake has returned to Court, and tells Elizabeth that the Spaniards have built great galleons. He does not know what for. A frown gathers on Gloriana's face. She springs up, in a violent temper. She realises that it must have originated from her refusal to marry Philip.

SCENE 3. *Philip's Court at Madrid.*

Philip is choosing a leader. Close-ups of nobles and their wives. Very few nobles left, as they are all at the Netherlands. Most of them are miserable-looking men. Medina Sidonia is chosen. He has a good name, is a fairly good soldier, but a poor sailor. He is, however, very obedient.

SCENE 4.

Spanish fleet patched up, but ready to go. Few men on board the galleons. Medina Sidonia arrives.

Philip and his Prayer.

QUOTATION from *Philip the King*, John Masefield, p. 321.

Lord, I am that Philip whom Thou hast made King of half the World. Thou knowest, Lord, how great a fleet I have fitted out to destroy the English, who work evil against Thee. Lord, I beseech Thee, keep that great Armada, now.

DRESS AND SCENERY

SCENE 1.

Slaves scantily attired. Lords richly dressed. Towers and domes, roofs and spires of Cadiz in background. Dull, dirty-looking dockyards, and general atmosphere of grime.

SCENE 2.

Royal gown of Elizabeth. Beautifully embroidered. Heavy head-dress, no crown. Drake and other lords neat, but not greatly jewelled.

Regal atmosphere, absolutely English. Beautiful furniture, lovely tapestries.

SCENE 3.

Philip and lords wonderfully attired. Ladies laughing and gay. Beautifully dressed.

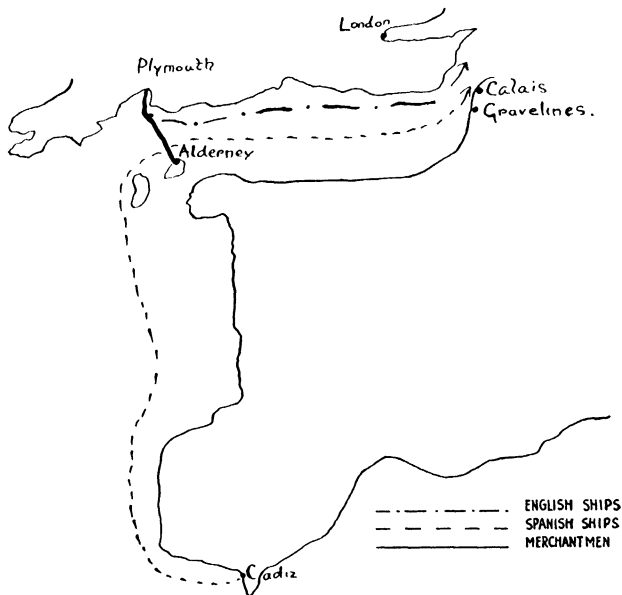
Stately court room. Heavy hangings. General aspect of wealth and show.

SCENE 4. Same as Scene 1.

REEL II

SCENE 1.

A map of Europe showing Cadiz, Plymouth, Calais, Gravelines, London, and Alderney.



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The Spanish ships setting off from Cadiz—going through Bay of Biscay—a rough sea. The merchantmen crossing the path of the great galleons in English Channel.

SCENE 2.

The merchantmen arriving at Plymouth and spreading the news of the galleon to their friends at an inn near the harbour. News reaches Elizabeth, and the English fleet is sent from Plymouth to follow the Spaniards up the Channel.

SCENE 3.

The Great Spanish ships waiting at Gravelines for Alva and Parma coming from the Netherlands with their armies. The English ships arriving at Gravelines very surprised at seeing the other fleet stationary.

QUOTATION, *Philip the King*, p. 257.

We were to ship the troops in Calais Road.
They lay encamped, prepared to go aboard.
To windward still the English fleet abode—
Still as in port when peace has been restored.

DRESS AND SCENERY

SCENE 1.

The Spanish ships—great and bulky.
Merchantmen, small and low in the water.
Bright and fine day but rather windy.

SCENE 2.

Merchantmen shabbily attired in long robes. The interior of the inn-room with roughly carved tables and benches. On table jugs—log fire. Men with rough beards, laughing and talking.

The harbour with English fleet—small.

Drake neatly attired with puffy breeches and ruffle round the neck.
English sailors similarly attired.

Ships leaving harbour.

SCENE 3.

Spanish and English ships like those mentioned before. Harbour at Gravelines.

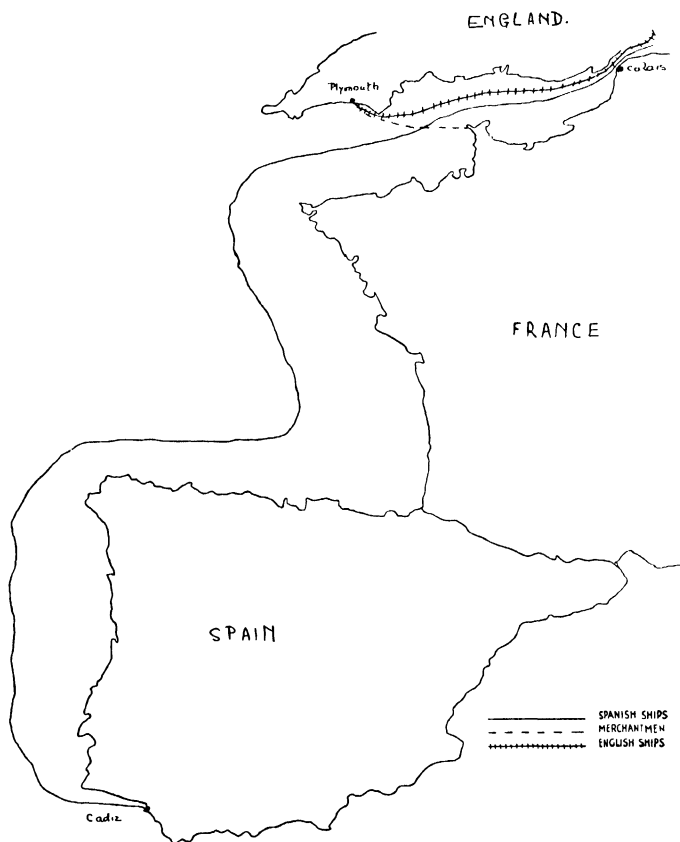
REEL III

SCENE 1. *Room in Elizabeth's Palace.*

Elizabeth is attended by several courtiers and ladies-in-waiting. A courtier enters and asks Elizabeth to allow Leicester to see her. The Queen consents, and Leicester begs to be allowed to take an army to help the Dutch, who are oppressed by the Spaniards. The Queen consents, and Leicester goes to tell his friends and give orders for a fleet to be prepared.

SCENE 2. *Two maps.**Map 1.*

The line from Cadiz travels alone till it reaches Alderney, when it is crossed by the one from Alderney. The first line continues up the Channel, the second one goes to Plymouth, and a third one keeps parallel to the first one on the English side of the Channel, from Plymouth to London.

*Map 2. A blank map from Europe.*

The line representing the Armada sets off, and at the same time one representing the messenger from Philip sets out to the Netherlands (across country). When the second line has covered about three-quarters of its journey, a line from London sets out and arrives in the Netherlands just after the second line. In the meantime the first line has stopped at Calais after having been (1) crossed by a line representing the merchantmen, and (2) followed by a line representing the English fleet (as in Map 1).

SCENE 3. *In Spanish Camp in Netherlands.*

Alva and Parma, the leaders, are sitting in state. A long line of Dutch prisoners enter to be tortured. The leader, a handsome young man, is just being put on the rack when a Spanish messenger is ushered in. He tells Alva and Parma that they must prepare to meet the Spanish Armada. Alva gives orders for the torturing to cease, and preparations begin. When all is ready, Alva gives the order for departure, but another army appears. It is Leicester and his troops.

SCENE 4. *In Calais Harbour.*

Medina Sidonia, the leader, on his galleon, the *San Philip*, is watching the Armada cast anchor in Calais harbour. He takes no notice of small English ships moving among the galleons. He has a telescope and is anxiously looking over the land to see the first sign of the approach of Alva.

In the meanwhile, Drake is giving orders for fire-ships to be prepared. It is a dark stormy night and the English lights are twinkling in the distance. Certain ships are filled with inflammable material and driven into the harbour. A light is set to the fire-ships, and the others leave the harbour.

When the Spaniards see the fire-ships, panic follows. The sailors try to steer the galleons into the open sea, but they are big and unwieldy and hinder one another. Eventually, some of the ships leave the harbour.

QUOTATION, *Philip the King*, p. 358.

Then, as they stood amazed
Others and others blazed ;
Then terror set them crazed.
They ran down screaming.
" Fire ships are coming ! Wake.
Cast loose for Jesus' sake."
Eight fire ships came from Drake.
Look at their gleaming !

REEL IV

SCENE 1.

Missiles from Spanish galleons pass over small English ships, as galleons are too high to aim low. Medina Sidonia tries to recall the fleet to order. There is so much panic among Spanish ships that there is no need for the English to fight, for the galleons crash into one another. Lord Howard, Admiral of the English fleet, leaves the English in the lurch to follow a stray ship. Drake takes command and leads the English against the Spanish. Little English ships make great holes in the Spanish ships. After six hours, only sixteen galleons are left out of forty. Of these sixteen, most are terribly battered. The English ammunition gives out and they have to retire. The Spanish crews fall down in prayer.

QUOTATION, *Philip the King*, p. 355.

King, they died helpless ; our unwieldy fleet
Made such a target to the English guns
That we were riddled through like sifted wheat.
We never came to grappling with them once.
They raked us from a distance and then ran.

SCENE 2.

In the Spanish fleet 4000 to 5000 perished, only 60 men being lost in the English fleet. All left of the Spanish fleet manage to get into the North Sea. Drake and Howard pursue them. Knowing that a gale is springing up, they turn into the Thames Estuary, leaving the gale to finish off the Spanish Armada off the coast of Scotland.

QUOTATION, *Philip the King*, p. 359.

At dawn the same wind held ; we could not strive.
The English drove us north as herdsmen drive.

SCENE 3.

Medina Sidonia returns to Spain and is jeered at by small boys calling out, " Drake is coming." He shakes his fist at them and goes off to wander in the orange groves and fume at his humiliation. In England, great rejoicings are held, dancing round the maypole, etc. In the docks, at London, Queen Elizabeth holds a review of the ships. The river is crowded with gaily decorated boats. Close-up of Queen Bess, smiling and presenting medals to Drake and Howard, who, after receiving them, kneel and kiss her hand."

II. **Scenario on the Industrial Revolution.** The girls in this case had made a special study of the Industrial Revolution for the purposes of the Higher Certificate examination. On seeing the League film, they expressed regret that there was no film on their set topic. It was suggested that they might indicate the sort of film that they considered would be useful for girls in their circumstances. Two girls drew up the scenario without any assistance beyond suggestions of sources from the history mistress. Whether they needed a film, in view of the excellent piece of work produced, is doubtful, but the scenario is interesting as showing that the League film had had a stimulating effect, and as giving the ideas of Senior Girls on the type of film desirable in schools.

THE DEVELOPMENT OF FACTORY LIFE

Scene 1.
Long Shot.

Distance view of a Derbyshire countryside.

Time, late summer, in the evening. A broad valley is seen, lying between low tree-clad hills. In the valley is a small village—a mere group of low, white, plastered cottages with thatched roofs. Each cottage has a "close" attached where a few fowls are kept.

There are no hedges, but three, large fields stretch round the village, which are divided into strips by baulks. The villagers can be seen harvesting in one of the fields, a second field is yet to be cut, whilst the third is lying fallow.

Behind the village, in the far distance, is the common where the cattle, sheep, and pigs graze.

Through the trees, on the right, the chimneys of the Squire's Hall can be seen.

Scene 2.
Medium Shot.

Exterior of one of the white cottages. It is only one story high and has an overhanging, thatched roof. The windows are small and have green shutters.

By the low, wooden doorway a woman and her daughter are spinning—the woman is spinning wool on a large spinning-wheel, and the girl flax on a smaller wheel.

Sub-title.

WEAVING IN THEIR SPARE TIME TO AUGMENT THE FAMILY INCOME.

A man advances up the path which leads to the house, carrying a basket of vegetables. The two spinners greet him and all three go into the house, but the girl runs back to carry in the spinning-wheels.

Sub-title.

WHEN THE DAY'S WORK IS DONE.

Scene 3.

Interior of the cottage. A small room with whitewashed walls and a low, rafted ceiling. The far wall is almost entirely taken up with the wide, open fireplace where a wood fire is burning, whilst hams and bacon hang inside the chimney, smoking. A lamp is hanging from the shelf. In the foreground is a plain, wooden table from the village carpenter's, on which are the remains of the evening meal—cheese, oaten cakes, pottage, and mugs for beer. On the left is a dresser with pewter and pottery arranged on the shelves, whilst in the corner by the fire is a simple corner cupboard. The rest of the furniture consists of a few stools, chairs, and a wooden arm-chair for the father.

The family are now seated round the fire, working—two boys, aged about twelve and ten respectively, are carding wool, the daughter and mother are employed as before (Scene 2), and the father is sitting in the armchair mending one of his farm implements. A dog lies at his feet.

A youth enters through a door on the right. He carries a bundle of sticks which he throws on the fire, and then goes out again.

Sub-title.

SPINNING WOOL.

Close Shot.

The woman spinning wool.

Sub-title.

FLAX.

Close Shot.

Girl spinning flax.

Sub-title.

CARDING WOOL READY FOR SPINNING.

Close Shot.

One of the boys carding wool. He has a "stock card" fixed to a stool in front of him, with the wire teeth sloping at a uniform angle away from him, whilst in his hands is a similar "stock" with teeth sloping towards him. When he works, the threads of wool are brushed parallel. The boy, having carded enough wool, takes it off the "stock card" with a needle "stick" and places it by his side on the floor. He then continues as before.

Close Shot.

Medium Shot.

Woman spinning; she finishes a reel and takes it off the wheel. She then turns towards the boy.

Sub-title. TO-MORROW YOU MUST TAKE SOME REELS TO JOHN LEE, THE WEAVER. BRING ME SOME MORE WOOL.

Medium Shot. The boy stops carding and brings her some more wool. The work continues as before.

Sub-title. AT THE WEAVER'S.

Scene 4. Exterior of the weaver's cottage, similar to the cottage in Scene 2. A loom can be seen through one of the small windows.

Medium Shot. The boy comes up the path carrying some reels of wool under his arm. He knocks at the door, and after a short pause enters.

Scene 5. Interior of the weaver's cottage. A bare, whitewashed room with a stone floor. A wide chimney on the right, near it a chair and a small table on which are some reels of wool, and an unlit lamp.

Medium Shot. When the boy enters through a door at the back of the room, the weaver, who is seated at the loom (left), turns from his work to greet the boy. He takes the reels, putting them on the table.

1st Sub-title. THERE ARE NOT SO MANY REELS THIS TIME.

2nd Sub-title. NO. WE HAVE BEEN HARVESTING.

Fade out. Scene as before.

Fade into

Scene 6. View of one of the open fields. Hills can be seen in the background.

Medium Shot.

Camera pointing lengthways up the strip. In the nearest strip the two boys and the man are cutting the wheat with scythes, whilst the women bind it into sheaves. A small child is also gleaning.

Other people can be seen harvesting in the other strips.

Fade out.

Scene 7. As Scene 5. The weaver nods, then turning back to the loom begins to work again. The boy stays to watch him. The weaver works with both feet and hands, using a flying shuttle which enables him to weave a double width of cloth.

Medium Shot.

Close-up. The weaver's hands working the flying shuttle.

Close-up. The weaver's feet working the treddles.

Medium Shot. The weaver continues his work. The boy says good-bye and turns to go.

Sub-title. MEANWHILE, IN A HOUSE IN BLACKBURN, HARGREAVES, A WEAVER AND CARPENTER, WAS TRYING TO FIND A QUICKER METHOD OF SPINNING. ONE DAY—

Scene 8. Long, bare room in Hargreaves' house.

Medium Shot. Three or four women are spinning. A door at the far end of the room opens and Hargreaves enters.

One of the women jumps up to meet him, and in doing so upsets her spinning-wheel, which continues to turn on its side. Hargreaves stands still in the middle of the room staring at the revolving wheel; he points at it.

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- Sub-title.* SEE, IT IS TURNING ROUND ON ITS SIDE.
He nods his head and goes out again, smiling to himself.
- Sub-title.* A FEW MONTHS LATER IN HARGREAVES' WORKSHOP.
Scene 9. A room in Hargreaves' house, a bench runs down one wall on which are various tools—hammers, pliers, vices, etc.—there is no other furniture in the low room except two stools.
Camera facing far corner of room. In the foreground is a spinning jenny. Hargreaves is demonstrating his invention to a friend, turning the handle to make the eight spindles work. He turns to the friend for his approval, who smiles and nods. The friend asks if he may work the machine, and Hargreaves lets him turn the handle.
- Sub-title.* HARGREAVES' SPINNING-JENNY WILL DO THE WORK OF EIGHT SPINNERS.
Cameo. Woman seated against a black background spinning with an ordinary wheel.
Camera moves to right showing cameo. Another woman spinning against a black background.
Camera moves to right. Cameo. Repeat.
Cameo. Repeat.
Cameo. Repeat.
Cameo. Repeat.
Cameo. Repeat.
Cameo. Repeat.
Close-up. Hargreaves' jenny in action.
- Sub-title.* IN 1769 ARKWRIGHT INVENTED A MACHINE WHICH SPUN STRONGER COTTON THREAD—A WATER-FRAME.
Scene 10. A bare room containing only a water-frame, which is working.
Medium Shot.
- Sub-title.* BEFORE.
Close-up. Hands against a black background pulling a thread spun with an ordinary wheel : the thread breaks.
- Sub-title.* AFTER.
Close-up. Hands against a black background pulling a thread spun with a water-frame : the thread does not break.
- Sub-title.* AND THEN CROMPTON COMBINED HARGREAVES' SPINNING-JENNY AND ARKWRIGHT'S WATER-FRAME INTO A " MULE."
Scene 11. Crompton's Mule working in small bare room.
Medium Shot.
- Sub-title.* BUT SOON MANY OF THE POORER PEOPLE COULD NOT AFFORD TO BUY THESE MACHINES, SO PEOPLE LIKE HARGREAVES AND CROMPTON SET UP SMALL FACTORIES WHERE THEY EMPLOYED 10 OR 20 WORKERS TO SPIN AND DYE THEIR YARN.
Scene 12. A long, low room. Ten women and girls are working mules to spin and other machines to card wool. They are all very busy.
Medium Shot.

Two, small boys are employed in carrying away the spun yarn, and in bringing more wool to be carded and spun. An overseer comes round to inspect the work, stopping to speak to one of the women as he passes. She shows him her work.

1st Sub-title. THE RATE OF SPINNING NOW FAR EXCEEDED THE RATE OF WEAVING.

2nd Sub-title. BUT AT LAST THE POWER-LOOM WAS INVENTED, WORKED BY WATER AND THEN BY COAL POWER, IN ORDER TO INCREASE THE RATE OF WEAVING.

Scene 13. Interior of a room ; in the right wall is a window overlooking a bare, lowland valley. In the room are three power-loom, one in the foreground and the other two behind, nearer the back of the room.
Camera facing far corner of room, so that walls face camera in this position.

Two men of the upper middle-class are standing near the window, examining the looms carefully. The taller of the two calls, and a shabbily dressed man enters.

The tall man orders him to demonstrate the loom ; the power is turned on.

Close-up. The loom begins to work, weaving very fine cotton material. The weaving is very even and good.

Medium Shot. The loom working. The tall man turns and speaks to his companion.

Sub-title. IT IS SO SIMPLE, A CHILD COULD WORK IT.

The smaller man nods and turns idly to look out of the window. Suddenly he starts and calls to his friend, who joins him at the window.

Sub-title. WHY NOT ? . . . THE PAUPER APPRENTICES.

The two look across the valley and nod.

Scene 14. A view across the valley. The valley is bare and bleak ; a stream flows through it, passing a low, stone mill and a tiny cluster of houses. On the opposite side of the valley (facing the camera) is a long, oblong building of grey stone. It is the workhouse.
Long Shot.

Medium Shot. The workhouse.

Scene 15. The interior of the workhouse. It is mealtime, and at the long tables which stretch from end to end of the bare, whitewashed room sit thin, poorly clad pauper apprentices, all dressed alike in long corduroys and grey jackets. They seem to be very hungry and consume their pottage greedily.
Medium Shot.
Camera facing up room.

Sub-title. PAUPER APPRENTICES.

Close-up. One of the thin, little boys gobbles up his pottage. When there is no more, he licks out the bowl.

Sub-title. BOUND FOR THE FACTORIES OF THE NORTH.

Scene 16. View of midland countryside. Low hills can be seen, outlined faintly on the horizon. In the middle distance is a small
Long Shot.

village on the banks of a broad river. The fields are now enclosed with new hedges and fences, so that the landscape is cut up by small squares and rectangles. Also, there are one or two scattered farms away from the village, surrounded by their own fields. A white, rough road winds up from the village towards the camera, and up this a cart is slowly making its way, jolting about on the badly kept road.

Medium Shot.

As the cart comes nearer, its occupants can be seen. They are all children round about the age of nine or ten, dressed alike in coarse clothes. All look very tired and some of them are weeping. They are jolted about a great deal on the rough road and look ill and faint.

The cart labours up the hill and jolts past the camera out of view.

Fade out.

Fade into

Scene 17.

Long Shot.

In the distance is a small Lancashire town, situated on the bare moors. A long, grey-stone mill, with a tall chimney, can be seen a little to the left of the town, which is a mere group of tumble-down houses by the side of a small river. A rough road winds up towards it, and the cart of children comes past the camera and goes up towards the town.

Sub-title.

THE DESTINATION AT LAST.

Scene 18.

Medium Shot.

A near view of the mill. It is a low, bare building with a great many windows, all of which are small and tightly closed. The cart of children comes up to the door and halts. The tired children are made to climb down by the driver of the cart.

Meanwhile, a strong, rough-looking man comes out of the mill and talks with the driver, whilst looking at the now frightened children. He orders them to go inside and follows them in with the driver, closing the door behind them.

Scene 19.

Medium Shot.

Interior of the mill. A low, rather dark room containing rows of looms.

The children and some men and women are busy working the looms. All are thin and seem very tired.

An overseer walks round carrying a whip. He also looks tired and therefore bad-tempered.

Close-up.

One of the children makes a sign to a friend across the room. The overseer comes up to him and thrashes him, and the child cowers down to his work, terrified.

Sub-title.

TOWARDS THE END OF THE LONG DAY.

Medium Shot.

The children all look very tired and can hardly stand up or keep awake.

One child droops over her loom asleep, but the overseer comes up and thrashes her until she wakes up again.

Another child falls asleep and is thrashed.

Sub-title.

THE NIGHT SHIFT.

A stream of weary, thin children comes through the low door at the back of the room, and comes up to the looms. The

children, who have been working all day, stumble wearily to their feet and go out in silence. One girl of about sixteen years of age sits motionless in her place until the overseer comes and shakes her roughly.

Sub-title.

BED.

Scene 20.

Medium Shot.

A low, bare room dimly lit by two candles placed on a bench on the right. The floor is almost entirely covered with beds formed of straw mattresses and blankets; these beds have only just been vacated by the children who have gone on night duty, and are still unmade.

About six children enter. They take off their shoes, and throw themselves exhausted on to the nearest beds. Some of them are even too tired to pull the blankets over them. Two more children enter and begin to take off their shoes.

Fade out.

Sub-title.

CONDITIONS IN RURAL AREAS GREW WORSE AND WORSE. THE COMMON LAND AND THE OPEN FIELDS WERE ENCLOSED, AND PEASANTS, BEREFT OF THEIR LIVELIHOOD, WERE FORCED TO OBTAIN POOR RELIEF OR TO SEEK WORK ELSEWHERE.

Scene 21.

Long Shot.

A Midland scene; a small village situated on the banks of a stream at the foot of a wooded hill is seen. The fields are now all enclosed as far as the eye can see except where the woods still remain. A few scattered farms can be seen amongst their own fields, and the Squire's mansion can just be seen through the trees.

(Compare with Scene 16.)

Scene 22.

Medium Shot.

Exterior of a peasant's cottage (compare Scene 2). The plaster hangs in shreds from the walls, the thatch is overgrown with lichen and weeds, and one of the windows is broken and stuffed with a piece of coarse material. A thin, ragged man comes wearily up the path and calls to some one within. His wife appears, and they talk together. She also is thin and pale; her clothes are very old and patched and her shoes are so worn that her feet can be seen through the gaping holes.

Sub-title.

WE MUST GO TO THE TOWNS OF THE NORTH LIKE THE OTHERS.

Scene 23.

Long Shot.

Distant view of a Lancashire town. There are many smoky chimneys silhouetted against the skyline, and even from this distance the town looks badly built, ugly, and dirty.

A rough track leads up to the town, by the side of which in the foreground is a group of tumble-down cottages of grey stone; they are low and badly built.

Along the road comes a little group of people—peasants seeking work in the town.

The ragged man is pushing a small hand-cart in which is a shapeless bundle of clothes, pans, and boxes, covered over with a ragged sheet. The woman by his side is also ragged and untidy; she is carrying a small baby which is wrapped in an old shawl. They are accompanied by three other children—

two boys and a girl—who are bare-footed ; they are also carrying bundles or baskets.

As the little group advances, it can be seen that they are all utterly wearied out with the long journey. Indeed, the children look as if they can hardly walk another step. One of the children begins to cry, but the mother is too tired herself to have very much sympathy with it.

Sub-title.

THE TOWN.

Scene 24.

Medium Shot.

A view of the main street of a manufacturing town. The road is very narrow and is badly cobbled. Great pools flood the middle of the road, and steep gutters down either side of the road serve as drains and refuse pits. The houses are low and badly built ; the slates on the roofs have come off in places, showing the rafters through ; the windows are badly fitting, and many of the panes are broken and have been stuffed with paper or coarse material to keep out the worst of the rain and the wind. Along the street are a few poor shops—ordinary houses with grimy wares displayed in the windows. These also are badly kept and usually dirty.

Many dark passage-ways and alleys lead off the street through low doorways and gateways ; these are even more dirty, muddy, and pestilential than the main street.

At the far end of the street can be seen a long, grey factory, whose tall chimney is pouring forth clouds of black smoke into the grey sky.

Fade out.

Fade into

Scene 25.

Medium Shot.

One of the courts leading from the main street. It is unpaved, and great stagnant pools of filth make walking difficult. The houses are even more broken-down than those in the main street ; hardly a window is unbroken ; the roofs are all broken-down, and on the right a broken flight of stairs leads up to the second story.

A woman comes out on to the broken-down balcony at the top of the stairs, and throws a bucket of dirty water into the court below. Then she goes inside again.

A ragged man comes slowly into the court and disappears down a dark passage which leads between two houses on the left.

Sub-title.

THE FACTORY.

Scene 26.

The factory in the early morning. A long, bare room in which are rows and rows of looms now silent for a brief space. A dim light filters through the tiny, closed windows and catches on the gleaming steel of the looms.

Then the workers begin to come in, quickly and silently, and take their places at the machines. Soon, every one has arrived and work begins.

An overseer comes round at intervals, inspecting the work and reprimanding the weavers if it is not satisfactory. The weavers themselves are all thin and poorly clad ; small children

are seen working side by side with adult men and women, for the work is mechanical and any one can do it.

Close-up.
Medium Shot.

One of the looms at work.
As before.

Sub-title.

A BREAK-DOWN.

Close-up.

One of the looms working. Suddenly it slows down, and the cloth is being woven faultily. At last it stops altogether.

The man who is working it tries to readjust it but he fails. Then he turns round and motions to some one to come to him. In a short time a small boy appears, and the man tells him to creep under the machine and mend it. The boy does as he is told, and when he crawls out again the machine is in working order.

The work goes on as before.

Sub-title.

WHEN LUNCH-TIME APPROACHES.

Medium Shot.

Scene as before (Scene 26, the first part), except that it is now about 12 o'clock and a little more light manages to filter through the tiny, closed windows.

A child, who is working a loom in the foreground, stops for a moment to take a piece of bread out of a paper packet. She begins to eat although she is too tired to be really hungry.

The overseer comes round, and when he sees that her loom is not working he tells her to put her food away and to get on with her work.

Sub-title.

YOU ARE WASTING TIME, GET ON WITH YOUR WORK.

Medium Shot.

The work goes on as before. The overseer goes up to one man and looks at his work. It is not satisfactory, and he is very angry with the unfortunate man.

Sub-title.

NEARLY TIME TO GO HOME . . . WILL THE WHEELS NEVER STOP ?

The workers all look very tired. Even the men look too tired to keep awake and the children droop over the looms. A woman in the foreground is staring before her at the whirling wheels as if she is in a trance ; her hands move mechanically to work the loom. The wheels seem to go round faster than before.

Changing to
Close-up.
Medium Shot.
Close-up.

The wheels seem to come slowly nearer, until they are huge, then they recede again until they are very far away, and then come closer again, whirling round at an incredible speed.

Medium Shot.

Then only one great wheel is whirling round, with a bright, white light flashing on the rim. Only a circle of light can now be seen revolving, which in its turn recedes slowly until it is a mere speck of light shining through the blackness.

Fade out.

A view of the room, again slightly out of focus ; it revolves dizzily.

The scene as before ; the woman who was staring at the machinery falls over on to the loom asleep. The overseer shakes her roughly until she begins to work again.

It is time to go at last ; the workers slowly rise to their feet, and walk shakily out. Some of them speak to their comrades in low voices, but most of them are too tired to talk much. One of the children in the foreground cannot get up because he is so tired ; a woman comes and lifts him to his feet, but he collapses on to the floor. She picks him up and carries him out.

A man comes in looking for his children to take them home. They come up to him slowly with dragging footsteps—a little girl with a shawl over her shoulders and two small boys—the man picks up the smallest boy and they all go out together.

Scene 27.

Medium Shot.

Followed by the camera keeping at a fixed distance from them.

A mean street in the town. Many workers from the mills are seen hurrying through the gloom, and amongst them is the little group which were seen in the mill—the man carrying his little boy, and the two other children who can scarcely walk. They go slowly up the street, often treading in the filthy pools.

The girl falls over a broken brick in the middle of the road, and is unable to rise again because she is so tired. The man has to put down the little boy and pick her up ; they go on again, but she is limping very badly. It begins to rain heavily.

They turn through a low gateway.

Scene 28.

Medium Shot.

Camera following at a fixed distance.

A badly-built court, unpaved and muddy. The boy and girl are walking up to the ankles in mud and filth. The houses can hardly be distinguished in the darkness, but an occasional square of flickering light betrays the presence of some wretched home.

Camera stationary. They go slowly across the court and stop outside a low, tumble-down hovel.

Sub-title.

HOME AT LAST.

They go down a small flight of stone stairs and disappear through a low doorway.

Scene 29.

Medium Shot.

A poor cellar with grey plastered walls (once white). The plaster is hanging off in places and there are great patches of green mould where the damp has come through the thin walls. The ceiling also is very damp and the plaster has come off in patches, showing the wood through. At the far end of the little room is a hearth on which a tiny heap of fire is burning. Often the smoke blows back into the room and floats up to the ceiling.

On the right is a small bed covered with a few torn sheets, and in the centre of the room is a dirty, deal table on which is a candle and a loaf of bread.

Two, broken chairs and three, old boxes are the only other articles of note in the room, whilst high up on the far wall is a small, closed window of opaque glass, with a piece of paper stuck over a hole in it.

By the fire a thinly clad woman is sitting, warming a pan full of water. She looks round when the man enters with the three children. She takes off the girl's shawl and hangs it on a nail in the wall.

Sub-title.

THERE IS NO MORE TEA LEFT.

Then they all sit round the fire. One of the boys has already fallen asleep. The woman gives them all a chunk of bread and a mug of water. The man asks her a question, but she shakes her head.

Sub-title.

TOO TIRED TO EAT.

The girl is too tired to eat, and she shakes her head when her mother presses her to eat up the bread. When the meal is over, the two boys throw themselves on to the bed, and in a minute are fast asleep. The woman pulls out a mattress from under the bed and the girl also goes to bed without even taking off her dress.

When they are all asleep, the man turns away to the door, sighing, and goes out.

Scene 30.*Medium Shot.*

The exterior of a mean public house. An open door and a dirty, uncurtained window through which can be seen the bar parlour, a shabby room with a square table in the centre and a bar at the back.

Although it is quite late the room is full to overflowing and people still continue to come through the open door—shabby men and thin, ragged boys.

The man (in Scenes 26-29) comes up to the door and disappears inside.

Scene 31.*Medium Shot.*

Interior of the bar parlour, which is now so crowded that many people have to stand up or sit on the bare floor. They are all consuming beer and most of them are smoking. A man gets up and begins to speak.

Sub-title.

GOADED INTO ANGER BY THE TERRIBLE CONDITIONS IN THE FACTORIES, THE STARVING WORKERS FORMED THEMSELVES INTO TRADE UNIONS TO DEMAND LIVING WAGES AND FAIR HOURS. THE MEMBERS MET BY NIGHT IN THE INNS TO DISCUSS THE TERRIBLE FACTORY CONDITIONS AND TO ORGANISE STRIKES—THE ONE WEAPON THEY HAD.

The man gets up on to the table and begins his speech, shouting at the top of his voice, gesticulating wildly.

Fade out.

Scene 32.*Medium Shot.*

As Scene 29—the cellar in the very early morning. The woman has just lit a tiny fire in the grate and the man is cutting a slice of bread.

Sub-title.

FORCED TO THRASH HIS OWN CHILD TO SAVE HIM FROM THE OVERSEER'S LASH IF HE IS LATE FOR WORK.

The woman goes over to the bed and shakes the children, who rouse themselves slowly. At last one of them gets up but the other goes to sleep again. The girl also gets up and they begin to eat breakfast—a crust of bread. When the other boy does not get up, his father goes over to the bed and pulls him out on to the floor. Still he will not get up. The man crosses over to the wall and gets down a piece of rope.

He comes over to the boy and thrashes him until he gets up sobbing.

Medium Shot. When the meal is finished the man goes out to work and a few minutes later the woman and the three children also go.

Fade out.

Sub-title. ON SUNDAY MORNING.

Scene 33. As Scene 26. The machines are not working, but the
Medium Shot. workers (and especially the children) are forced to come back to clean the machines.

They are all busy cleaning the looms with oily rags, etc. The children have to creep underneath to clean the machinery, and to poke their small hands into crevices which could not otherwise be reached.

Close-up. One of the small boys at work.

Medium Shot. As before.

Sub-title. BUT ALL MILLS WERE NOT SUCH PRISON HOUSES TO THE WORKERS.

IN NORTH LANARK ROBERT OWEN WAS ORGANISING HIS MILLS ON SOCIALISTIC PRINCIPLES.

Portrait. Robert Owen.

Sub-title. HIS EMPLOYEES WORKED FOR SHORTER HOURS AND RECEIVED LARGER WAGES.

Scene 34. Interior of the Lanark Mills. A long, bright room with a
Medium Shot. lofty roof and wide windows.

The looms are working and the workers are respectable and contented-looking men and women. (*N.B.*—No young children employed.) They smile at their work, and when the overseer comes round he smiles too and talks to them in a kindly voice.

Sub-title. OWEN DID NOT EMPLOY CHILDREN, BUT PROVIDED A SCHOOL FOR THE INFANTS FAR FROM THE DIN AND NOISE OF THE FACTORY.

Scene 35. A large, airy room where there are many happy-looking
Medium Shot. children. A kindly schoolmistress is sitting at a piano. The children take their places ready to do a simple country dance, which they perform with skill and energy.

Sub-title. SO BENEFICIAL DID OWEN'S EDUCATIONAL SYSTEM PROVE THAT IN 1802 SIR ROBERT PEEL TRIED TO INTRODUCE COMPULSORY EDUCATION IN ALL FACTORIES. BUT WITH POOR RESULTS.

Scene 36. A dark room in the basement of the factory. Many children
Medium Shot. are gathered together at one end of the room (right) whilst at the other end of the room a stern schoolmistress is sitting at a desk, teaching a group of older children.

The teacher closes her book, and the children she has been teaching go to different groups of the other children and begin in their turn to teach them.

1st Sub-title. THE MONITORIAL SYSTEM IS USED . . . THE TEACHER TEACHES THE OLDER CHILDREN, AND THEN THESE "MONITORS" TEACH WHAT THEY HAVE LEARNT TO THE YOUNGER CHILDREN.

2nd Sub-title. THUS THE CONDITIONS IN THE FACTORIES GREW WORSE IN SPITE OF MANY RIOTS AND STRIKES. AT LAST, IN 1833, AN ACT WAS PASSED REGULATING CONDITIONS. . . .

3rd Sub-title. NO CHILD UNDER NINE YEARS OF AGE WAS TO BE EMPLOYED.

4th Sub-title. INSPECTORS WERE TO BE APPOINTED TO SEE THAT THE ACT WAS ENFORCED, AND TO INSPECT THE FACTORIES.

Scene 37. A scene in a mill. It is much the same as before except that no young children are working and the workers do not seem quite so tired as before. (See Scene 26.)
Medium Shot.

Two inspectors come in, accompanied by the manager. The overseer comes forward and shakes hands with them. They walk round inspecting the looms, the work, and the conditions, frequently stopping to make notes or to speak to the workers.

One of them looks round and then points to one of the windows which is closed.

Sub-title. YOU NEED MORE VENTILATION IN HERE.

The overseer sends a boy to open the window but it sticks.

Close-up. The inspector makes a note of the matter in his book.

1st Sub-title. AFTER 1833, THROUGH THE WORK OF THE INSPECTORS, CONDITIONS IN THE FACTORIES GRADUALLY IMPROVED.

2nd Sub-title. UNDER THE FACTORY ACT OF 1853 . . .

3rd Sub-title. CHILDREN'S HOURS ARE RESTRICTED TO 12 HOURS PER DAY.

4th Sub-title. SATURDAY IS TO BE A HALF-HOLIDAY.

Scene 38. The door of a factory, which opens into a narrow, unpaved street. It is early on Saturday afternoon. The sun is shining faintly through the clouds of grimy smoke.
Medium Shot.

The door opens, and the people begin to come out. Most of them look rather tired, but all are happy because it is Saturday afternoon.

Fade out.

Fade into

Scene 39. A view of the town moor on Saturday afternoon. Groups of untidy men and youths are playing games or standing in groups, talking. The women also are walking up and down, chatting to their friends.
Long Shot.

Fade out.

1st Sub-title. GRADUALLY THE MINIMUM AGE FOR WORKERS IN FACTORIES WAS INCREASED, WHEN EDUCATION WAS MADE COMPULSORY.

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2nd Sub-title. THE ELEMENTARY EDUCATION ACT OF 1876 MADE SCHOOL ATTENDANCE COMPULSORY BETWEEN THE AGES OF 5 AND 12.

3rd Sub-title. THE EDUCATION ACT OF 1891 MADE EDUCATION FREE.

4th Sub-title. THE HOURS OF ALL FACTORIES WERE REDUCED AND THE WAGES WERE INCREASED . . . UNTIL TO-DAY.

Scene 40. Modern, Lancashire, textile factory. The looms are working.
Long Shot. The room is long, high, and airy. The great windows in the roof flood the whole place with light.
The girls are singing at the work or chatting together.

Fade out.

Sub-title. IN THE EVENING.

Scene 41. A view of the factory playing-fields, with the factory chimneys in the background.
Long Shot. In the foreground a cricket match is being played, whilst on the right the tennis courts can be seen full to overflowing with laughing players.

Fade out.

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APPENDIX D

MEMORANDUM OF A CONFERENCE OF TEACHERS IN ELEMENTARY SCHOOLS HELD AT LEEDS UNIVERSITY ON JANUARY 27, 1930, TO DISCUSS THE RESULTS OF FILM EXPERIMENTS UNDERTAKEN IN THEIR SCHOOLS

1. Professor Strong, Professor of Education, and Professor Hamilton-Thompson, Professor of History, in Leeds University, and members of the Film Enquiry Committee of the Historical Association convened the meeting. Forty-four teachers were present. Professor Strong opened the meeting by inviting the teachers to give their views on the value as educational aids of the films seen during the enquiry.

2. A Headmistress of a Girls' Senior School said that she had been into the classroom on various occasions while films were being shown and had always been struck by the absorption of the children in the film. She thought the question of the value of the film rested on how much of the film matter the child retained. Were the delayed tests proving that the children remembered a film better than an oral lesson? It was replied that the results of the delayed tests were not yet tabulated in full, but that the children appeared to remember more than usual when the film was combined with a following discussion.

3. A Headmaster developed this point. He was interested in the use of the film for history teaching, since he had successfully used the projector in Geography lessons. He had tested 443 children after they had seen history films in school. He had been frankly disappointed at the result of the first test. The children's compositions as compositions were not nearly so good as he had anticipated. But on reflection he realised that though there was some lack of balance in the essays, all the children had seized on certain points and developed them. It was evident that their interest had been thoroughly aroused—and this was borne out by discussion with the children. There was only one girl who had not enjoyed seeing the film. She said she did not like films at all. This girl had some eye trouble; obviously her dislike was due to this physical cause. The strain was too great for her. He disagreed with the view that children were mentally passive while watching the film. This was prevented by the anticipation in the children's minds. They were always wondering what was coming next. The delayed tests given in January, seven months after the original showing, corroborated his earlier view that the children had gained something from the film that they would not otherwise have had. The children remembered the films vividly. He was deeply impressed with the value of the film, and considered it far better than the wireless as an educational aid. This final remark on the superiority of the film over wireless talks called forth general approbation from the meeting.

4. The next speaker, the Headmaster of a Mixed School, gave it as his opinion that although all children were interested in the film, the amount of value derived varied with the individual. This was true of all methods of

teaching. The visual child would benefit by the application of this method. And it seemed to him that the child of inferior capacity was held by the film rather than by oral methods. In any case, the film was another avenue to the child mind, and of a kind likely to stimulate imagination. It gave realism to history teaching by supplying details that only those with an exceptional imagination could supply for themselves. Many children would have a far clearer notion of scaling the Heights of Abraham if they were shown the Wolfe film than if they depended on reading.

5. The Headmaster of a Rural School said that the installation of a projector would be of great value in his type of school where children had not so many advantages of libraries and so on as town children, nor the same opportunity of seeing films in the ordinary way. His children had shown tremendous interest in the film experiments. They had discussed the films with eagerness in class, and had reached a far higher standard than usual in their written work. At the beginning of the week he had wondered if the interest was due to the novelty of the whole proceedings, a darkened classroom, a visitor, but the interest had increased rather than abated as the week went on. Moreover, the pleasurable feature of novelty would be counter-balanced with country children by their shyness of a strange adult; they were not used to many grown-up strangers. A new teacher in the ordinary way would check their responsiveness. But the children had been anxious to take part in the lessons, even in the talk on the difficult film on the League at the end of the week. He was sure that films would be useful in the teaching of history. The facts had impressed themselves in the children's memory. He kept hearing references in his lessons nowadays to what the children had seen on the film. The children often drew parallels between new facts and film material. The film was obviously useful as a link between one period and another. Further, the film had stimulated his scholars to seek information for themselves. They still frequently asked things about the films and were ready to read for further information on the film subjects.

6. One Headmaster doubted whether pictures were ever such a stimulus to thought as reading. But it was very difficult to train children to read for themselves. It was possible that the film might lead children to read by arousing their interest in a subject. Moreover, throughout a school day we do not want the child always to be reasoning and thinking. In teaching history we sometimes are chiefly wanting children to absorb facts—perhaps as a basis for thought later. Here the film would be an asset. He would like, for instance, a film showing the life of an Abbey.

7. The meeting was unanimously of opinion that the film is a help in the teaching of history and that it stimulates the interest of the child, especially of the dull and backward child; it was obvious from the tests that the film did not encourage a passive attitude on the part of the child, but the reverse. The question of the amount of self-activity induced by the film in comparison with the oral lesson was further discussed.

8. A teacher argued that the film would only be used in conjunction with oral teaching. The film by itself would not go far, but used as an aid to oral teaching it led to good results. His boys had carried a good deal away from the films, and he had noticed boys making sketches of things they had seen on the films in school for a considerable time after the experiments. An instance was cited of a boy from another school who had read *Beric the Briton* with interest after seeing the Roman Britain film, and had told his teacher he wished he

could see a film on that. A little less activity in the classroom did not matter if the film led to outside reading.

9. Another Headmaster said he thought the film led to greater self-activity than the oral lesson. Boys had brought him models made by themselves out of school of things seen on the film. In response to a query, the Investigator said that a child had brought her a piece of coiled pottery made as he had seen the Britons make their bowls in the first reel of the Roman Britain film.

10. A teacher remarked that her experience of the use of films in school was too limited to admit of any generalisation on this point, but was it not possible to judge from the effect of the picture-house film? In the playground her boys were continually enacting scenes, mostly of the Wild West, taken from the cinema. If we gave the child accurate and dramatic historical films, we might get something of the same result. A teacher wished to confirm the first part of the last speaker's statement. Few people present had sufficient knowledge of the use of the historical film in school to know clearly how its results compared with those of the oral lesson in the inducing of self-activity on the part of the child.

11. It was given as the general opinion of the meeting that while the teachers present would not care to say that the film stimulates more self-activity than the ordinary methods, yet it was their opinion that self-activity certainly was stimulated by the film.

12. The question of the type of film most useful in elementary lessons was next discussed. The first speaker on this point stressed the need for considering the age of the child. Younger children needed something concrete, something they could appreciate. They liked action and excitement. He had just marked a delayed test on the Bronze Age film. His class, Standard IV., had obviously enjoyed all the action scenes and remembered the film very vividly. They had much appreciated the point that the modern knife was sharper than the Bronze Age tool, since the Chief cut his finger in feeling the edge of the Boy Scout's knife. He deprecated much talking while the film was in progress.

13. A second teacher, who had seen most of the films used for the experiment, considered the Wolfe film to be the best for boys of 12 to 15, because the development of the action was purposive. The film proceeded from causes to effects. The type of film was connected with the question of the amount of mental effort induced. The amount of mental effort required in an oral lesson depended on the way in which a teacher presented his material. In the same way, the mental activity called forth by a film depended on the way the subject matter was treated. The Nelson film missed many opportunities by its chronological treatment. The boys were confused by model ships being used four times over to illustrate tactics. In retrospect, they could not differentiate one engagement from the others. They were disappointed at the absence of Napoleon from the film. Could not the same material have been incorporated in a film with a very definite object, all the action linked together to show how Napoleon tried to conquer the world and failed? His boys had been asked what films they would like to see. They wanted Napoleon, Cromwell, the French Revolution. The speaker suggested that a film on the growth of Leeds, showing its change from an agricultural to an industrial community, would well illustrate lessons on the Industrial Revolution.

14. Another speaker stressed the need for historical accuracy. There must be no "stageyness" in the film, as in the first part of the film on Roman Britain in the scenes where the Chieftainess appears.

15. One Headmaster suggested the value of scenes of social life, something on the lines of the Roman Britain film, and indicating the dress, dwellings, and occupations of different periods. Biographical films would be useful. Boys would like a film on Clive in India carried out on the lines of the Wolfe film. Much useful social background could be taught by the filming of historical novels whose dramatic stories would lend themselves well to the film. It was objected that the glaring, historical inaccuracies of many of the best of such novels constituted a difficulty.

16. With regard to the length of the film, one speaker said that before making the films the aim must be determined. If the teachers wanted films to convey the atmosphere of past ages, the film should be relatively long, or the child would be whisked back to the present just as he had been led to imagine himself in the Stone Age. He considered that the film was more useful for this, for taking the child out of himself completely, so that he momentarily lived in a bygone age, than for the teaching of detail.

17. The suggestion was also put forward that the length of the film depended on the age of the child and his consequent powers of concentration. Younger children needed very short films. Even then, they should know something of its subject matter, to know what to look for. This view received general support. The film should be preceded by lessons and followed by discussion to achieve its maximum value. The meeting suggested that in general it was useful to have short films of one reel (15 minutes), though two reels might be used when the object was primarily the creation of atmosphere, or where the subject was already known.

18. The teachers considered that the projector used for the experiment had given a clear picture with no unreasonable amount of flicker. It was possible to show films in a classroom of average size without having the children too near the screen.

19. The difficulty lay in the provision of a free room that could be darkened without interfering with ventilation. These difficulties were not insuperable. A more serious question was that of cost of equipment. This was not disproportionate to the benefits likely to be gained.

APPENDIX E

MEMORANDUM OF A CONFERENCE OF TEACHERS IN SECONDARY SCHOOLS, HELD AT LEEDS UNIVERSITY ON FEBRUARY 3, 1930, TO DISCUSS THE RESULTS OF FILM EXPERIMENTS IN THEIR SCHOOLS

1. Professor Strong and Mr. Dawes, Headmaster of the Castleford Secondary School, represented the Film Enquiry Committee of the Historical Association. Thirty-six teachers were present. Professor Strong explained the object of the meeting, the free ventilation of the teachers' real opinion on the film method, and asked if the film could be considered to obtain results not otherwise gained.

2. The first speaker described the results of showing the Wolfe film to three forms, a Fifth and two Fourth Forms. Most of the boys knew a good deal about the campaign beforehand. The film had very different effects on the classes. The older boys were rather blasé. The younger boys enjoyed the film very much; he had later become tired of hearing them talk about it. The written results were not what he had expected. A boys dropped to D, D boys rose to A. The film had a better effect on the worse than on the better pupils. In the delayed test, taken six weeks later, the boys as a whole did remarkably well. This seemed another example of the value of the use of illustrations in history teaching. But boys seldom looked at pictures hung on the wall, while the movement in the film held their attention. The question arose as to who would prepare school films, for the question of accuracy was vital. We did not want films of the "Robin Hood" type, containing absurd mistakes. The Chairman asked the speaker if he was on the whole in favour of the use of films in history teaching. The reply was given that they were very useful as an addition to existing methods. It was another method of approach for younger scholars. But films were ancillary to oral teaching. The query was put: "Do you consider that films give anything to the scholar not derivable from reading?" The teacher replied that many boys did not read history apart from the text-book. The film gave a more vivid picture than could be gained from reading all but very detailed accounts. It was a help to the duller and unimaginative boys. The older and better boys said of the film, "This is not history. You cannot learn about the Conquest of Canada from a film."

3. A second teacher said that she felt that the film was useful as an addition to teaching; it seemed to help the average child, but it should be used only occasionally. The Wolfe film devoted a disproportionate amount of time to one incident. Her older girls had obtained something from the League film which they had not acquired from earlier discussions, a sense of the interdependence of nations.

4. A history master said the film certainly brought a special contribution. It had provoked extraordinary activity among his boys, though he had tried to avoid the film seeming anything in the nature of a stunt by not letting the classes know beforehand of the experiments. The written work was not so

good as he had expected, but the debates in school were keen. Most of the points in the film were taken up ; the boys were very interested. Undoubtedly they had been stimulated. After a film of the type of Roman Britain, pupils would have a better idea of the period than before. He preferred such a film, that could serve to illustrate a series of lessons, to a film showing merely one incident.

5. A Classics mistress said that the film on Roman Britain had made her girls more ready to discuss and argue. They seemed to wish to discuss things seen on the film, to know about the ordinary life of the people. She found that it had a better effect with the older ones, School Certificate girls, than the younger. The older ones were rather blasé but had found the film stimulating. The history mistress from the same school said that the films had benefited the bright and dull children rather than the average child. The stupid ones had been stimulated, and the film roused the brighter girls to a critical attitude. Films might be very useful, though we could scarcely hope for exact accuracy. All films contained a good deal that would be helpful from the point of view of illustration. The Headmistress felt that showing events in their geographical setting was helpful. A child was trained to visualise by what she heard and read. She would be extremely sorry to see films taking the place of the spoken word, but she thought they might be a tremendous aid.

6. A history mistress mentioned a debate some of her pupils in the middle school had held on the value of films. They were very critical. Some thought the film was too quick to give an adequate impression. Others preferred their own conception ; they thought that if they had seen a film on the Armada they would have been discouraged from giving their own play-version of *Philip of Spain*.

7. Another teacher replied that she had not found the film to prevent her girls from using their imagination. The film, on the contrary, provided starting-points from which they could build up their own imaginative pictures.

8. Two teachers said the Nelson film had destroyed interest in the Nelson period rather than the reverse.

9. A history master said that the Wolfe film shown without any follow-up lesson appeared to have given his boys such a view of the Conquest of Canada as they acquired from a bad text-book. The details were stressed, the movement not appreciated as a whole. The boys who had not seen the film had a better sense of balance than those who had. The film could give the setting of events admirably, but would it aid in the creation of what we hoped to see in the Fifth Form—a sense of historical perspective. He was asked if he did not think that carefully made educational films would avoid the pitfall of exaggeration of the immaterial. He replied : “ I do not know. A film cannot give an outline account. If it does not give details it is uninteresting.”

10. The question was discussed as to whether a film was more useful as a starting-point or came better as a summary at the close of a series of lessons. The teachers instanced examples of the successful use of both methods. One teacher said that in reference to the Wolfe film, which had just been under discussion, she had found it valuable as a starting-off point for the study of the Conquest of Canada. She had taken lessons with several classes after use of the Wolfe, Nelson, and League films, and considered that really good films would be a valuable teaching aid.

11. A teacher rose to make the point that it had long been accepted as part of the province of the history master to train pupils in the use of books. Films

were now part of everyday life, and if we did not train children in school to take a proper interest in and to criticise films, they would not criticise the ordinary cinema film.

12. The question was then put to the meeting from the Chair. "Might I say, then, that the meeting is in favour of the use of the film as an occasional aid in the teaching of history?" All agreed.

13. The type of film desirable was then discussed. One Headmaster said that he was surprised to hear criticism of the length of the Wolfe film. Forty minutes did not seem over long to give to the taking of Quebec. It was well worth it. In reply, the critic of the length of the film said that she thought that the film placed a good deal of emphasis on one incident. It was pointed out that the children learned from the film far more than the mere story of the action; they learned "background" for a whole period of warfare. The first teacher said that the film period had seemed to her "breathless." The film was too fast; more breaks and stops were needed. Every one agreed on this. The film was too long to be taken in a 45 minutes' lesson with ease.

14. One teacher suggested that the school film should not be longer than 20 minutes. It was too much strain, both on the mind and the eyes, for children to concentrate on a film for 45 minutes. The short film would allow for any pauses desired, and for discussion after the film. The general feeling of the meeting was that films of 20 or 15 minutes were sufficiently long; no school, classroom film should take longer than 30 minutes.

15. Regarding the construction of the film, one teacher said that greater compactness was needed; in the Wolfe film there was too much preliminary matter; one wondered when the Heights of Abraham were to appear. Another teacher said that this was one of the most irritating features of picture-house films, and should not disfigure the school film. Discussion was raised on the topographical film. Could existing remains be used as background? It was pointed out that such survivals were generally in the midst of modern streets; it was almost impossible to blot out the surroundings. One Headmistress suggested that in a place such as Provence a series of episodes of different periods might be staged; there was sufficient material. This raised the point as to whether such a series of episodes was of value. Should the film consist of isolated episodes or have a connected narrative? A mistress thought isolated episodes, the bird's-eye view of the history of a place that had been suggested, would prove very confusing to children; some link was necessary. A master said that in his opinion a narrative form was preferable; the sequence helped children to remember, and they liked a story form. Another mistress said there should be some definite sequence. Her Fifth Form had found the Naval film very disconnected. How unity should be reached depended on the age of the class. A narrative form appealed to all scholars. For younger forms the story could be of a more dramatic type. One teacher suggested that for senior forms the film would be useful for showing diagrams, growing maps or the type of illustration used by Mr. Wells in his *Outline of History*—lines leading up to an event. These could be shown in 5 or 10 minutes at the end of a lesson.

16. Practical matters were discussed. The meeting felt that in view of the time taken to fix the apparatus, and the weight of the machine used, it must be fixed in one room. In a large school, a film-lesson time-table might need to be made. It was pointed out that in the new schools provision could be made for housing the projector; the time might come when every classroom had its projector just as to-day every classroom has its blackboard. The type of

apparatus would be modified. On the whole, the teachers felt that the practical difficulties might be overcome.

17. One Headmaster said the greatest difficulty seemed to be in obtaining the films. The greatest accuracy was needed. If projectors began to be used to any great extent in schools, there would be a rush to provide films. Who was going to do this ? A teacher optimistically replied that the Educational Film Companies were merely waiting for the demand.

APPENDIX F

A NOTE ON THE NUMBER OF CHILDREN, ETC., TAKING PART IN THE EXPERIMENTS

CHILDREN CONCERNED IN THE INFORMAL TESTS

Type of School.	Number of Experi- ments.	Number of Children taking part in each Experiment.
Average Elementary School (Town)	18	741
Elementary Schools in Poor Districts (Town)	24	1067
Rural Schools, Elementary—		
Seniors—6 tests }	8	183
Juniors—2 tests }		
Experiments with children under 10—		
(a) Elementary, 6	7	(277
(b) Secondary, 1) 21
Secondary Schools—		
(a) History Tests	46	1504
(b) Latin Tests	5	150
TOTAL	<u>108</u>	<u>3943</u>

CHILDREN CONCERNED IN THE FORMAL TESTS

504 children took part in the Formal Tests ; each of these was concerned in many experiments, most of them in 5. Counting each child once for each test written, the number obtained is 1800. Hence, the figures for the number of experiments and of children taking part in each experiment throughout the Enquiry are	38	1800
Children Concerned in Experiments: TOTAL		<u>5743</u>

ADULT STUDENTS

	Number of Experi- ments.	Number taking part in each Experiment.
Training College	1	198
University	1	70
Workers' Educational Association	2	120

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